

Pre-CERCLIS Screening Assessment

Texas Molecular Deer Park, Harris County, Texas

TXD000719518



REGION VI

Prepared in cooperation with the U.S. Environmental Protection Agency
June 2011



PRE-CERCLIS SCREENING ASSESSMENT

TEXAS MOLECULAR 2525 Battleground Road Deer Park, Texas

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PRE-CERCLIS SCREENING ASSESSMENT

TEXAS MOLECULAR 2525 Battleground Road Deer Park, Texas

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1 INTRODUCTION

A Pre-CERCLIS screening is a review of information on potential Superfund sites to determine whether the site should be entered into the EPA's Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS).

The Texas Commission on Environmental Quality (TCEQ), under a grant from the United States Environmental Protection Agency (EPA) Region 6, conducted a Pre-CERCLIS Screening Assessment at the Texas Molecular facility (site) in Deer Park, Texas (TMDP). The goal for completing the Pre-CERCLIS Screening Assessment for the Texas Molecular site was to determine whether further steps in the site investigation process are required under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (Ref. 1, pp. 1-7).

Completion of this Pre-CERCLIS Screening Assessment included reviewing existing site information/file material; determining ground water and surface water characteristics; determining surrounding population characteristics; and conducting an on-site and off-site visual inspection to determine if hazardous substances have migrated to surround areas. This document includes site information including a description of the site and its location (Section 2), potential sources and releases (Section 3), a completed Pre-CERCLIS screening checklist (Section 4), pathway assessments for ground water, soil, surface water, and air (Section 5), and references (Section 6).

SITE INFORMATION

2.1 Location and General Information

Site Name:

Texas Molecular

Alias Site Name(s): Not Applicable

Directions to Site:

On Independence Parkway, approximately two miles north of State

Highway 225.

Latitude:

29.73676109

Longitude:

-95.09218597

Address:

2525 Battleground Road

City:

Deer Park

County:

Harris County

State, Zip Code:

Texas, 77571

EPA ID No.:

TXD000719518

State ID No.:

70874

Other ID No.:

PWS 1012699, RN102170024, CN601421829

Ownership:

Private

Owner/Operator:

Texas Molecular LLC and TM Deer Park Services LP

Years of Operation onsite: 09/2001 - current

Inspection Completed on: 03/25/2010

Personnel:

TCEQ Personnel: Terry Andrews, Sherell Heidt

TMDP Chemical Personnel: Shane Wilson, Frank Harris

2.2 Site Description

Site Location and Surrounding Properties

The site consists of an active wastewater management facility operated by TMDP on approximately 14.5 acres of land located at 2525 Battleground Road, Deer Park, Harris County, Texas. The Houston Ship Channel is located approximately 0.5 miles northwest of the site and the San Jacinto State Park is located approximately one mile northeast of the site (Fig. 1, Ref. 2, pp. 1-8, and Ref. 3, p. 1).

The site is located in an industrial area with numerous refineries and petroleum tank farms. Bordering the site to the north and west are tank farms operated by Western Oilfield Supply, Occidental Chemical Corporation, and Vopak Terminal, Inc. (Vopak). Bordering the site to the east is National Tank Services, a commercial tank cleaner and transporter of hazardous and non-hazardous materials. Across Battleground Road to the south of the site, is a tank farm operated by International Terminal Company. Approximately one quarter of a mile to the southeast of the site is a large refinery operated by Oxy Vinyls, LP (Figure 2).

Except for the park lands of San Jacinto State Park, land use within two miles of the site is industrial/commercial. The nearest residential property is located approximately 2.2 miles to the southwest of the site. Several childcare facilities and schools are located approximately 3.25 miles southwest of the site. A hospital and a childcare facility are located approximately 2.25 miles northwest of the site. (Figure 1, Figure 2, and Ref. 3, p. 1).

Site History and Operations

In 1982, Disposal Systems, Inc. (DSI) began operations on-site that included industrial solid waste disposal by means of a Class 1 underground injection well. In 1987, GNI Group, Inc. (GNI) assumed the rights of DSI. In 2000, GNI filed for bankruptcy. In

September 2001, Texas Molecular assumed the rights of the business and began operating on-site as Texas Molecular Deer Park Services, LLC. Approximately three years later, Texas Molecular Deer Park Services, Limited Liability Company (LLC) began operating as Texas Molecular Deer Park, Limited Partnership (LP). (Ref. 4, p. 1, and Ref. 5, p. 2)

The business activities of TMDP consist of managing wastewaters that are difficult to treat by disposing of wastewater using two on-site underground injection wells (Hazardous Class I Commercial Deep wells). One of the injection wells is located in the northern part of the facility and the other is located in the southern part of the facility. TMDP is permitted by the TCEQ to manage metal and pesticide bearing wastewaters and wastewaters that are classified as Doo1, Doo2, Doo3 (Flammable, Corrosive, Cyanides, and Sulfides). Using its injection wells, TMDP is permitted to inject waste streams that have a specific gravity of less than 1.2 at well depths between 5,530 to 7,350 feet. TMDP is permitted to inject the following wastewaters: hazardous and non hazardous waste that consist of organic waste (aqueous and liquid miscellaneous); reactive waste; aqueous waste (general and acidic); contaminated waters; and containerized liquid waste (Ref. 6, p. 2-3, Ref. 7, p. 2, 4).

Historically, TMDP also had an active registration in the Air New Source Permits, Industrial and Hazardous Waste, and Water Licensing Programs. (Ref. 8, p. 1)

Texas Molecular Technical Services, LLC owns and operates the registered Public Water System (PWS), #1012699, that is located on-site. (Ref. 8, p. 1).

The PWS #1012699 is a non-transient/non-community water system that serves a population consisting of 50 individuals. The system consists of one entry point (EP001) and one water well, G1012699A. The water well has been active since January 1, 1913. The water well is located in the northwest corner of the site at Latitude: 29.7364N

Longitude: 95.0914W. The water well is approximately 472 feet deep and pumps water from the Chicot Aquifer at a rate of 87 gallons per minute. The system stores and distributes water using a 30,000 gallon above ground storage tank, two service pumps, and a 525 gallon pressure tank (Ref. 9, pp. 1-3, Ref. 10, p.1).

Investigations and Violations

The most recent routine Comprehensive Compliance Investigations of PWS #1012699 was conducted by TCEQ PWS personnel on March 13, 2007. No alleged violations were documented at the time of the investigation. On December 29, 2003, TCEQ conducted a compliance investigation and issued GNI a violation regarding PWS #1012699 for failure to provide a minimum pressure tank capacity. The violation had been resolved on the same day as the compliance investigation (Ref. 9, p. 2, Ref.11, p. 1-8).

During routine PWS compliance monitoring that was conducted from April 2006 through December 2009, several water samples that were collected at EP001 resulted in the detection of methyl *tert*-butyl ether (MTBE). MTBE is an unregulated chemical that is primarily used as a gasoline additive and as a solvent. Subsequent analysis of these samples found that the detected levels of MTBE did not exceed the recommended maximum MTBE concentration of 20 to 40 ug/L, provided by the EPA in a 1997 Drinking Water Advisory publication. The advisory recommended that keeping levels of contamination in the range of 20 to 40 μ g/L or below to protect consumer acceptance of the water resource would also provide a large margin of exposure (safety) from toxic effects (Ref. 12, p. 1, Ref. 13, pp. 1-4, and Ref. 14, pp. 1 and 3).

Analysis of water samples collected from EP001 from April 26, 2006 to December 7, 2009 detected MTBE concentrations that varied from 2.4 - $7.2 \mu g/L$. In response to the reoccurring detections of MTBE, the TCEQ notified TMDP that they were required to analyze for Volatile Organic Compounds on an annual basis. The water system is not in

violation of TCEQ drinking water standards because MTBE is an unregulated chemical (Ref. 13, pp. 1-4, Ref. 14, p. 2, Ref. 15, pp. 1-2).

On March 25, 2010, the TCEQ conducted a Pre-CERCLIS site visit. During the site visit, the TCEQ personnel inquired about potential sources of the MTBE contamination in the TMDP PWS. The TMDP representatives said that they believe the MTBE detections in their PWS are probably from several MTBE spills that have occurred off-site. The TMDP representatives also said that although employees at TMDP do not drink the water from the PWS, they do use the water to bathe (Appendix E, p. 1).

During the site visit, the TCEQ personnel inspected the well location and did not observe any leaking drums, soil stains, cement stains, or any sources of contamination near the well. TMDP personnel informed the TCEQ that photographs were not allowed to be taken (Appendix E, pp. 1-2).

The contaminant MTBE has also been detected in water samples from the neighboring PWS at Vopak, which is located to the north and west of the site. The Vopak terminal is a hub that handles provides services that include but not limited to heating and nitrogen blanketing that consists of purging and cleaning tank cars, tank car switching, transferring tank cars and tank trucks to vessels, and transferring vessels to vessels across docks. From December 1997 through June 2009, compliance water samples that were collected from PWS 1010580, which is registered to Vopak, were found to have concentrations of MTBE that ranged from 2.0 μ g/L to 11 μ g/L. Due to the re-occurring detections of MTBE, Vopak is also required to analyze for VOCs on an annual basis. (Ref. 16, pp. 1-3, Ref. 17, pp. 1-2, and Ref. 18, p. 1).

3 POTENTIAL SOURCES AND RELEASES

3.1 Source and Release Information

The TCEQ investigators did not observe or find any documentation of on-site spills or releases of MTBE. ((Ref.16, pp. 1-4).

The TCEQ investigators identified the following potential off-site sources that may have contributed to the MTBE detections in the Texas Molecular PWS water samples:

- Vopak stores and manages numerous shares of petroleum products, including MTBE. Vopak has reported five releases of MTBE to the Texas Toll-Free Spill Reporting Hotline and TCEQ Spill Response Line (Ref. 18, p. 1, Ref. 19, pp. 1-3, Ref. 20, pp. 1-3, Ref. 21, pp. 1-3, Ref. 22, pp, 1-5, Ref. 23, pp., 1-3). These include the following:
 - 1. January 5, 2007: Tank #602 developed a tank bottom leak of MTBE. A third part consultant assessed the release by performing an assessment and collecting samples (Ref. 19, pp. 2-3).
 - 2. July 9, 2007: A "missed valve alignment" caused a release of MTBE. The release was mitigated by notifying Harris County Pollution Control and cleaning up the spill. The spill was noted to impact the land (Ref. 20, pp. 2-3).
 - 3. March 12, 2008: An aboveground 80,000 barrel storage tank was over filled and resulted in a release of MTBE. The release was mitigated by spraying the impacted area with foam and vacuuming the remnants of the release. The release of MTBE was noted to impact the land and air (Ref. 21. pp. 2-3).
 - 4. March 13, 2009: A storage tank was overfilled, which resulted in a release of 130,000 gallons of MTBE. The release was mitigated by containing the material, excavating the contaminated soil,

transporting the contaminated soil off-site, and backfilling the excavated area with uncontaminated soil. A total of 269 tons of contaminated soil was removed. Three confirmation soil samples were collected and analyzed and a MTBE concentration of 0.0142 mg/kg was detected in one of the samples. This detected concentration was below the TCEQ Tier 1 Residential Soil Protective Concentration Limit of 0.62 mg/kg. No further action was required (Ref. 22, pp. 2-5).

- 5. December 3, 2010: A leak in an aboveground storage tank was discovered on December 2, 2010, which resulted in a release of MTBE. The release was mitigated by putting the tank out of service, assessing the tank floor, and removing the contaminated soil (Ref. 23, pp. 2-3).
- Vopak reported two releases of MTBE into the surface and groundwater to the EPA Toxics Release Inventory Chemicals Database (TRI). From 2002-2005, Vopak reported the discharge of 12,559.75 pounds of MTBE into receiving streams or water bodies. From 19985-2005, Vopak reported the release of 90,737 pounds of MTBE into the environment by means of underground injection wells (Ref. 24, p. 21)
- Shell Oil Company Deer Park Refining, L.P (Shell) stores and manages numerous shares of petroleum products, including MTBE. Shell reported that 49,000 pounds of MTBE was released into the environment in the year of 2004 by means of an on-site surface impoundment disposal. The company also reported 12,479 pounds of MTBE was released into the environment in 1998 and during the years of 2000-2004 by means of discharge into receiving streams or water bodies. (Ref. 25, pp. 1-2 and Ref. 26, p. 6)

• There have been 35 reported leaking petroleum storage tanks in Deer Park, Texas. (Ref. 27, pp. 1-7).

4 PRE-CERCLIS SCREENING ASSESSMENT CHECKLIST

Complete the following checklist. If "yes" is marked, please explain below.

		Yes	No
1.	Does the site already appear in CERCLIS?		X
2.	Are there potential waste sources at the site?	X	
3.	Is a release of hazardous substances observed or strongly suspected and are there receptors in the area that may be affected? If yes, site may require immediate attention.	Х	
4.	Does the site consist of a release of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found?		X
5.	Is the release into a public or private drinking water supply due to deterioration of the system through ordinary use?		X
6.	Is some other program actively involved with the site (i.e., another Federal, State, or Tribal program)?	X	
7-	Are the hazardous substances potentially released at the site regulated under a statutory exclusion (i.e., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the NRC, UMTRCA, or OSHA)?		X

	·	165	NO
8.	Is there sufficient documentation that clearly demonstrates that		
	no release has occurred or could have occurred that could cause		
	adverse environmental or human health impacts (e.g.,		
	comprehensive remedial investigation equivalent data showing no		X
	release above ARARs, completed removal action, documentation		
	showing that no hazardous substance releases have occurred, EPA	•	
	approved risk assessment completed)? Provide reference(s).		

Please provide an explanation below for each question answered with a "YES."

- 2. As discussed in Section 3.1, hazardous materials are stored and managed onsite.
- 3. The detection of MTBE in the groundwater indicates that a release of MTBE into the environment has occurred. It appears that the release is from an off-site source.
- 6. Texas Molecular Technical Services, LLC owns and operates PWS #1012699. The PWS system consists of one water well, G1012699A, which is located on-site.

5 PATHWAY ASSESSMENT

The potential pathways for human and environmental receptors evaluated for this site screening include soil, surface water, and ground water.

5.1 Ground Water Pathway

The TCEQ assessed the ground water pathway that occurs within four miles of the site.

The site overlies the Gulf Coast aquifer, which consists of five hydrostratigraphic units, from youngest to oldest: the Chicot aquifer, the Evangeline aquifer, the Burkeville confining system, the Jasper aquifer, and the Catahoula confining system.

The Chicot aquifer includes the Beaumont Clay and extends through the Willis Sand. The Chicot aquifer is recognized for an abundance of water in Southeast Texas due to the high percentage of sand in the aquifer formations. The depth of the base of the Chicot aquifer is approximately 700 feet below the ground surface in the site area. Some of the PWS wells in the site area are reportedly screened in this aquifer. (Ref. 28, pp. 2-8)

The Evangeline aquifer is approximately 2,100 feet thick and underlies the Chicot Aquifer, encompassing the entire thickness of the Tertiary-aged Goliad Formation sands. The Chicot and Evangeline aquifers are geologically similar and the basis for separating them is primarily because they differ in hydraulic conductivity. The Evangeline aquifer is considered to be one of the most prolific aquifers of the Coastal Plain, yielding large quantities of good quality ground water. The top of the Evangeline aquifer is approximately 700 feet bgs in the site area. The base of the Evangeline aquifer is approximately 2,800 feet bgs in the site area. The deepest PWS wells in the vicinity of the site are screened in this aquifer. (Ref. 28, pp. 2-8 and Ref. 29, p. 4)

The Evangeline aquifer and the underlying Jasper Aquifer are separated by the Burkeville Confining System, which consists of silt and clay strata and ranges from 300 to 400 feet in thickness. The Jasper aquifer is the deepest confined water bearing unit in the Gulf Coast aquifer system in Texas and consists of the Fleming Formation and the Oakville Sandstone. The base of the Jasper aquifer is approximately 4,200 feet bgs in the site area (Ref. 28, pp. 2-8).

The Catahoula confining system underlies the Jasper aquifer and has an average thickness of 200 to 600 feet. The Catahoula Formation is composed of non-marine sands, clays, and volcano-clastic deposits interbedded with fluviatile sediments (Ref. 28, pp. 2-8).

The source water well for the Texas Molecular PWS is located in the northwest corner of the facility and is 472 feet deep and reportedly withdraws water from the Chicot aquifer. (Ref. 9, p. 3).

Drinking water uses within the four-mile receptor distance limit include 79 water wells that are used as sources for numerous PWSs. There are three active domestic water wells located within a four mile radius of the site. All of these wells reportedly produce water from the Chicot and Evangeline aquifers (Figure 3).

5.2 Soil Pathway

During the Pre-CERCLIS investigations discussed in Section 3.1, the investigators did not observe any contaminated soils or distressed vegetation on-site. Most of the site is covered with gravel, asphalt, and concrete. The site is secured by fencing and gates and the access to the site is controlled (Figure 2 and Ref. 3, p.1).

5.3 Surface Water Pathway

Although the site topography is very flat, it is assumed that on-site drainage of stormwater is likely to flow west and empty into the Tucker Bayou, which is approximately 1,990 feet downstream of the site. Tucker Bayou flows to the north and empties into the Houston Ship Channel approximately three quarters of a mile feet downstream of the site. The Houston Ship Channel flows into Galveston Bay and then empties into the Gulf of Mexico (Figure 1 and Ref. 3, p. 1).

There are no drinking water intakes located downstream of the site. The site does not lie within a flood prone area (Figure 1, Ref. 30, p. 1, and Ref. 31, p. 1).

5.3 Air Pathway

There are no documented citizen complaints of any air releases. The nearest residence, school, or daycare to the site is located more than two miles from the site. There are no commercial agriculture, silviculture, or any designated recreation areas located within 0.5 miles of the site (Figure 1).

6 REFERENCES

- U.S. Environmental Protection Agency. Improving Site Assessment Pre-CERCLIS Screening Assessments, EPA-540-F-98-039; OSWER 9375.2-11FS;PB98-983310; October 1999. 4 pages.
- Harris County Appraisal District. Real Property Account Information. Account
 #0440990010057, #0410020050013, #0440990010111, and #9840000110003. Parcel
 Map. Facet 6056B, Quadrant #2, #3,#6, and #7. Accessed April 1, 2011. 8 page.
- 3. Google Earth TM. Imagery date January 4, 2010. Accessed November 23, 2009. 1 page. Available: www.google.com
- GNI Waste Management Services (formerly DSI). The GNI Group. Deer Park, Texas.
 Accessed April 4, 2011.
 3 pages. Available: http://www.facilityreview.com/Site%20Profiles%20a-e/DSI-GNI.htm
- 5. Texas Commission on Environmental Quality. Investigation Report. Texas Molecular Limited Partnership. CN601546807. RN100209568. Investigation #564467. July 25, 2007. 5 pages.
- 6. Texas Commission on Environmental Quality. Permit to Conduct Class I Underground Injection under Provisions of Texas Water Code, Chapters 26 and 27, and Texas Health and Safety Code Ann. Chapter 361. Permit No. WDW4229. 7 pages.
- 7. Texas Commission on Environmental Quality. Permit to Conduct Class I Underground Injection under Provisions of Texas Water Code, Chapters 26 and 27, and Texas Health and Safety Code Ann. Chapter 361. Permit No. WDW422. 7 pages.
- 8. Texas Commission on Environmental Quality. Central Registry Internal Reporting Query. Texas Molecular. RN #102170024. Accessed April 4, 2011. 1 page.
- Texas Commission on Environmental Quality. Water System Data Sheet Report. Texas Molecular. PWS #1012699. Accessed March 18, 2010. 3 pages.
- 10. Texas Commission on Environmental Quality. Texas Molecular. PWS #1012699. PWS-System Flow Diagram. Investigation #553767. March 13, 2007. 1 page.

- 11. Texas Commission on Environmental Quality. Consolidated Compliance and Enforcement Data System. Texas Molecular Investigation List. 8 pages.
- 12. Texas Commission on Environmental Quality. Texas Molecular. PWS #1012699.

 Document addressed to Casey Borowsky, Chief Executive Officer. Subject: Ground Water Contamination Confirmed: MTBE. May 8, 2009. 2 pages.
- 13. Texas Commission on Environmental Quality. Water Quality Summary. Texas Molecular. PWS#1012699. 4 pages.
- 14. Environmental Protection Agency. Methyl Tertiary Butyl Ether. November 24, 2008. 10 pages.
- 15. Texas Commission on Environmental Quality. Texas Molecular. PWS #1012699.

 Document addressed to Casey Borowsky, Chief Executive Officer. Subject: Public Drinking Water System-Texas Molecular. Year 2009 Chemical Sampling Schedule and Cost Estimate, and Monitoring Frequency Status Report. May 8, 2009. 2 pages.
- 16. Texas Commission on Environmental Quality. Texas Molecular Site Visit. Site visit log entry. 7 pages.
- 17. Texas Commission on Environmental Quality. Water Quality Summary. Vopak Terminal Deer Park. PWS#1010580. 3 pages.
- 18. Texas Commission on Environmental Quality. Document addressed to Pieter Bakker. Subject: Vopak Terminal Deer Park. Chemical Sampling Schedule and Cost Estimate, and Monitoring Frequency Status Report. January 20, 2009. 2 pages.
- 19. Vopak Terminal Deer Park. Accessed April 7, 2011.
 2 pages. Available:
 http://www.vopak.com/business segments/storage/142 page terminalSpecific.php?t
 erminal=Vopak+Terminal+Deer+Park
- 20. Texas Commission on Environmental Quality. Consolidated Compliance and Enforcement Data System. Texas Molecular Incident Detail. #85698. 3 pages.
- 21. Texas Commission on Environmental Quality. Consolidated Compliance and Enforcement Data System. Texas Molecular Incident Detail. #93755. 3 pages.

- 22. Texas Commission on Environmental Quality. Consolidated Compliance and Enforcement Data System. Texas Molecular Incident Detail. #104835. 3 pages.
- 23. Texas Commission on Environmental Quality. Consolidated Compliance and Enforcement Data System. Texas Molecular Incident Detail. #121371. 5 pages.
- 24. Texas Commission on Environmental Quality. Consolidated Compliance and Enforcement Data System. Texas Molecular Incident Detail. #148066. 3 pages.
- 25. Environmental Protection Agency. Envirofacts Report. Vopak Logistics Services USA Inc. Deer Park. Accessed April January 13, 2010.

81 pages. Available:

http://oaspub.epa.gov/enviro/tris control.tris print?tris id=77536MPKNC2759B

26. Shell Oil Company, Deer Park, Texas. Accessed April 13, 2011.

3 pages. Available:

http://www.shell.us/home/content/usa/aboutshell/projects locations/deerpark/about deer park/

27. Environmental Protection Agency. Envirofacts Report. Shell Chemical, Shell Oil Deer Park LP.

31 pages. Accessed March 8, 2010. Available:

http://oaspub.epa.gov/enviro/multisys2.get list?facility uin=110000599424

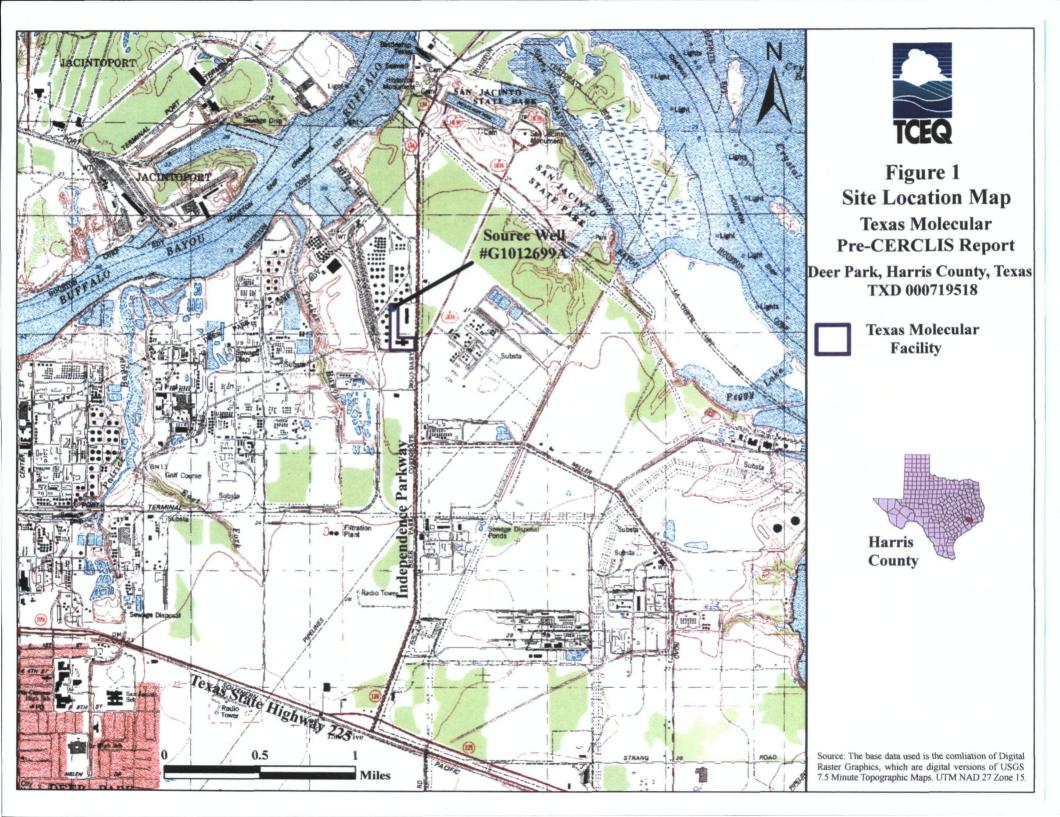
- 28. Leaking Petroleum Storage Tank Database. Accessed April 7, 2011.
 - 7 pages. Available: http://www.tceq.state.tx.us/cgi-bin/permitting/rpr/lpstquery.pl
- 29. Texas Water Development Board. Aquifers of the Gulf Coast of Texas. Report 365. February 2006. 9 pages.
- 30. Texas Department of Water Resources. Digital Models for Simulation of Ground-Water Hydrology of the Chicot and Evangeline Aquifers Along the Gulf Coast of Texas.

 Published on May 1985. 10 pages.
- 31. Texas Commission on Environmental Quality. Revisions to δ 307-Texas Surface Water Quality Standards. November 12, 2009. 2 pages.
- 32. Federal Emergency Management Agency. Flood Insurance Rate Map. Harris County, Texas. Panel 930 of 1150. Accessed April 8, 2001.

1 page. Available:
http://www.msc.fema.gov/webapp/wcs/stores/servlet/MapSearchResult?storeId=1000
1802.000
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APPENDICES

Appendix A
Site Location Map



Appendix B Site Features Map

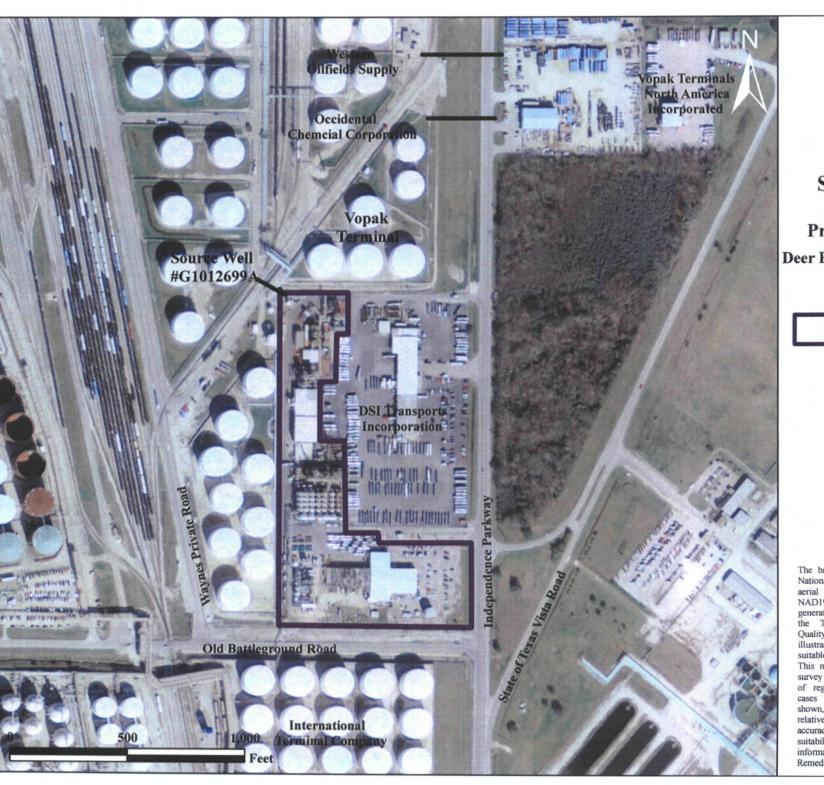




Figure 2
Site Feature Map
Texas Molecular
Pre-CERCLIS Report

Deer Park, Harris County, Texas TXD 000719518

Texas Molecular Facility



The base data used for this map is the 2007 National Agriculture Imagery Program (NAIP) aerial Imagery of Harris County Projection: NAD1983, UTM Zone 15. This map was generated by the Remediation Division of the Texas Commission on Environmental Quality on April 1, 2011. It is intended for illustrative or information purposes, and is not suitable for legal, engineering or survey purposes. This map does not represent an on-the-ground survey conducted by or under the supervision of registered professional land surveyor. In property boundries are where shown, it only represents their approximate relative location. No claims are made to the accuracy or completeness of the data or suitability for a particular use. For more information concerning the map, contact Division at 800-633-9363.

Appendix C Groundwater Sources Within a 4 mile Radius Map





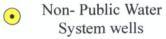
Figure 3

Groundwater Sources Within a 4-mile Radius

Texas Molecular Pre-CERCLIS Report

Deer Park, Harris County, Texas TXD 000719518





Public Water System wells



The base data used for this map is the 2007 National Agriculture Imagery Program (NAIP) aerial Imagery of Harris County Projection: NAD1983, UTM Zone 15. This map was generated by the Remediation Division of the Texas Commission on Environmental Quality on April 1, 2011. It is intended for illustrative or information purposes, and is not suitable for legal, engineering or survey purposes. This map does not represent an on-the-ground survey conducted by or under the supervision of registered professional land surveyor. In where property boundries are shown, it only represents their approximate relative location. No claims are made to the accuracy or completeness of the data or suitability for a particular use. For more information concerning the map, contact Remediation Division 800-633-9363.

Appendix D Site Visit Field Notes

MARCH 25, 2010 JEXAS MOLECULAR DEEPARY, TK TXN 000607053 WEATHER: CEAR, BLUE SKY. SOME RESIDUES FROM RAINSHUWERS SWITHE EARLY MORNISTUG.

0855 SHERELL HEIDT AND TERRY ANDREWS DEPART FROM TCEQ HOUSTON. 0915 ARRIVEATTEXAS MOLECULAR (TM) IN DEER PARK, TX. CHECK IN AT THEGATE.

MEET WITH SHANEWILSON LENURGIMENTAL MANAGER OF TEXAS MOLECULAR (TM) CHEMICAL COMPANY MR WILSON STATED AND CONFIRMED THE FOLLOWING:

- . THE WATER SUPPLIED FROM THEIR PUBLIC WATER SYSTEM WELL PROVIDED WATER TO THE SAFETY SHOWERS EYE WASH STATIONS ONSITE. THEY ALSO USE IT FOR FACILITY CLEANUPS.
- · TM DEER PARK HAD AN RUPA FACILITY INVESTIGATION (REI) IN THE PAST THAT DID NOT INDICATE ANY MAJOR CONCERNS.
- · TM DEERPARK INSECTS MOSTLY MILL CASH (MARRIA
- . SHANE NICEDN STATED THAT HE WOULD BE ABLE TO EMAIL NE (SHEIDT) A COPY OF A SPECIFIC PAGE OF A REPORT THAT HAD INFORMATION REGARDING MATERIALS INTECTED.

MR. WILSON ESCORTED TOEG PERSONNEL OUT OF THE MAIN OFFICE BUILDING TOWARDS THE CENTER OF THE FACILITY PROPERTY, WE METMR. FRANK HARRIS (VICE PRESIDENT OF TM, DEERPARK (CHEMICAL)

- · MR. HARRIS ACKNOWLEDGED THAT THEY WERE AWARE OF THE MTBE DETECTIONS.
- · MR. HARRIS CONFIRMED HISTORICAL SPILLS OF MTBE FROM A NEIGHBORING FACILITY. MR. HARRIS EXPRESSED CONCERN OF THE MTBE DETECTIONS AND POINTED OUT THAT HIS EMPLOYEES SNOWERED WITH THE WATER PROVIDED FROM THEWELL) DAILY.

...cont'd

5H 63/25/2010

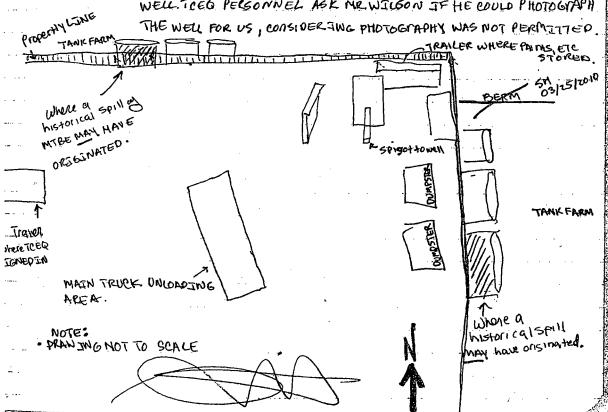
TERRY AN DREWS EXPLAINED THE SUPERFUND PROCESS TO MR. HARRIS, INCLUDING BUT NOT LIMITED TO WHAT A PRE-CERCLIS WAS AND THE PURPOSE OF OUR VISIT TODAY.

> · MR. HARRIS DID EXPRESS CONCERN REGARDING TO WHAT APPEARED TO BE THE LACK OF TOEQ IN VOLVEMENT RERTAINING TO MIBE DETECTIONS IN TM, DEERPARK PWS AFTER NIBE SPILLS INTHE AREA.

31,0 \$15 12010

TM PERSONNEL ESCORT MR. WILSON ESCORT TOER PERSONNEL VIA A CART (RESEMBGNUAGOLFCART) TO THE NW CORNER OF THE PROPERTY.

TOER PERSONNEL SIGN IN AT A OFFICE IN A TRAILER NEAR THE WELL TOEG PERSONNEL ASK MENTIGON IF HE COULD PHOTOGRAPH THE WELL FOR US, CONSIDER TWO PHOTOGRAPHY WAS NOT PERMITTED.



-- contid

- *MR. WILSON TOOK A PHOTO OF THE WELL AND SAID HE WOULD EMAIL US A PHOTO.
- TOEG SAW SEVERAL DRUMS (THAT APPEARED TO BE IN GOOD CONDITION) THAT WERE WEATLY PLACED IN CLUSTERS COVERED INSIDE UNICENTIFIED BUILDINGS. SEVERAL BINS (THAT APPEARED TO BE IN GOOD CONDITION) THAT WERE WEATLY ALIGNED ALONG UNIDERH FIED BUILDINGS.
 TOEG DID NOT SEE ANY OF CONCERN.
- · TO EQ SAW NUMEROUS EQUIPTMENT THAT APPEARED TO BE USED IN HANDLING WASTE
- THERE WERE GEVERAL PUDDLES OF STANDING HATER
 THAT MOST LIKELY ARE RESULT OF HEAVY RAINS FROM
 THIS MOUNING. TOEG DID NOT WITNESS ANYTHING OF
 CONCERN PERTAINING TO THE STANDING WATER.

•MR.WILSON MENTIONED THAT THE BERM (SHOWN)

ON THE SKETCH ON PAGE 3) EXTENDED OUT AND WAS LOCATED

NEAR TM, WATEWELL JUST NORTHOF THE WELL ACROSS THE

PROPERTY LINE

THEWELL WAS LOCATED ON AN
ELEVATED CONCRETE PAD(~2 FEET)
ABOVE
GROUND)

TANKFARM

BERM

DIRTROAD (APPENS TO BE

MARCH 25, 2010 TEXAS MOLECULAR, DEERPARK, TX TXW 000607 053 · · · COO+1) SCHEMATIC OF SURROUNDING AREA DRAWING NOT DRAWN TOSCALE. VOPAK TELMONAL DEER PARK INC NATIONAL TANK SERVICE A TRIMEC COMPANY FERNS MOLECULAR VORAK TEXAS MOLCCULAY SITE ROAD INTERNATIONAL TERMINAS COMPANY CLAN HALBORS ANY AS LUNGED BY TOM C CLEAN HATBOIS.

DEPART FROM SITEANN ARRIVE AT TOER HOUSTON OFFICE AT 1105

Appendix E Health and Safety Plan



Pre-CERCLIS Site Reconnaissance Health and Safety Plan

for

Texas Molecular Deer Park, Harris County, Texas

March 2010

HEALTH AND SAFETY PLAN FOR PRE-CERCLIS SCREENING SITE RECONNAISSANCE

TEXAS MOLECULAR FACILITY DEER PARK, TEXAS

Prepared by:

Texas Commission on Environmental Quality

Reviewed and approved by:

Site Safety Officer:

Name

3/25/2010

TCEQ Central Office Health & Safety

Representative:

3/25/10 Date

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EMERGENCY CONTACTS

In the event of any situation or unplanned occurrence requiring assistance, the appropriate contact(s) should be made from the list below. For emergency situations contact the appropriate response teams.

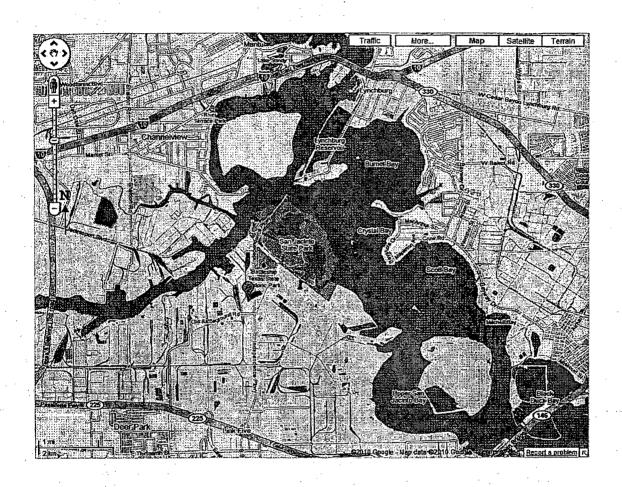
Contingency Contacts	Phone Number				
Fire Department	911				
Police	911				
Sheriff's Department	911				

Medical Emergency						
Hospital Name	East Houston Regional Medical Center					
Hospital Phone No.	(713) 393-2000					
Hospital Address	13111 East Freeway, Houston, Texas 77015					

TCEQ Contacts								
TCEQ SSDAP Program Coordinator and PA/SI Program Manager	Melissa Cordell Austin, Texas	(512) 239-2473						
TCEQ Central Office Health and Safety Representative	Omar Valdez Austin, Texas	(512) 239-6858						
TCEQ Site Investigation Manager	Sherell Heidt	(713) 767-3708						

Site Location Map

A: Texas Molecular, 2525 Battleground Road, Deer Park, Texas



Hospital Location Map

A: Texas Molecular. 2525 Battleground Deer Park, Texas 77571 B: East Houston Regional Medical Center 13111 East Freeway Houston, Texas 77015 (713) 393-2000

- 1: Start out going South on WAYNES PVT BLVD, toward Old Battleground Road. -go 0.2 mi
 - 2: Turn LEFT onto OLD BATTLEGROUND ROAD. -go 0.2 mi
 - 3: Turn RIGHT at INDEPENDENCE PKWY -go 1.9 mi
 - 4: Merge onto STATE ROUTE 225 WEST. go 3.2mi
 - 5: Take the exit toward SAM HOUSTON TOLLWAY/BELTWAY 8 and Turn RIGHT to merge onto SAM HOUSTON TOLLWAY/BELWAY 8 NORTH -go 4.4 mi
 - 6: Take the exit onto Interstate Highway 10 West, toward Houston -go 2.6 mi
 - 7: Take exit 779A, toward WESTMONT STREET -go 0.1 mi
 - 8. Merge onto EAST FREEWAY SERVICE ROAD/NORTH SHORE DRIVE 0.2 mi
 - 9: Turn RIGHT at ROCKGLEN STREET, go 213 feet
 - 10: East Houston Regional Medical Center is on the LEFT.



TEXAS MOLECULAR PRE-CERCLIS SCREENING SITE RECONNAISSANCE

Health and Safety Plan

1 Introduction

The provisions of this Health and Safety Plan (HASP) apply to the Pre-CERCLIS Screening site reconnaissance to be conducted at Texas Molecular, Deer Park, Texas, an active waste disposal facility. Activities to be performed include walking the site and areas of potential contamination, interviewing property owners and site personnel, collecting GPS data, obtaining photographic documentation, and logging site information. This plan has been prepared by the <u>Project Manager</u>.

This HASP describes the procedures to be followed and the protective equipment to be used by all TCEQ personnel for this phase of work on this project. The health and safety requirements presented herein are based on information available at this time and are subject to revision upon subsequent discoveries regarding potential hazards at the site. As this plan is intended to minimize the risk of injury from physical hazards and exposure to chemical hazards, TCEQ personnel are required to abide by its provisions.

2 Personnel

The site inspection team is comprised of two (2) TCEQ personnel for the site visit. The Site Investigator is designated as the Site Health and Safety Officer who will be responsible to see that the inspection is performed in a manner consistent with the Health and Safety Plan. The Site Health and Safety Officer will be responsible for Health and Safety briefings before each daily on-site inspection. The Site Health and Safety Officer may suspend field activities indefinitely, if health and safety of personnel are endangered. The Site Health and Safety Officer may suspend an individual from the field activities indefinitely for infractions of this HASP.

3 Site Description and History

3.1 Site Reconnaissance Tasks

The Preliminary Assessment Site Visit Checklist shall be followed. Upon arrival at the site, the inspection team will conduct a site safety briefing in which the contents of this health and safety plan will be discussed. The inspection team will conduct an initial survey of the site conditions to ensure all necessary safety precautions are considered during site activities (see Attachment B for Health and Safety Checklist). Site Reconnaissance may include reviewing records, taking photographs,

walking the site, and observing onsite conditions.

3.2 Site Description

Texas Molecular is an active facility. It is solely operated by TM Technical Services LLC. It is jointly owned by TM Deer Park Services Limited Partnership and Disposal Systems Incorporated. Texas Molecular business activities consist of managing wastewaters that are difficult to treat by disposing them via Hazardous Class I Commercial Deep wells. Texas Molecular manages wastewaters that are classified as D001, D002, D003 (Flammable, Corrosive, Cyanides, and Sulfides) and wastewaters that consist of metals and pesticides.

Texas Molecular operates a permitted public water system (PWS) to supply water to its facility. The water system is classified as a non-transient/non-community industrial/agricultural water system that serves a population consisting of fifty individuals. The Texas Molecular PWS is registered in the PWS Program, Identification No. 1012699. The System has one water supply well that is located on the facility property. The well was drilled in 1978 and is 472 feet deep. The source of water is the Chicot aquifer.

3.3 History of Documented Contamination

As the operator of a PWS, Texas Molecular is required to analyze the PWS for Volatile Organic Compounds on an annual basis. As the result of this testing, low concentrations of a volatile organic chemical, methyl *tert*-butyl ether (MTBE), has been detected several times. These levels have not exceeded TCEQ or EPA drinking water standards.

MTBE was detected in samples taken at Entry Point #1 on 03/23/2009 (3.5 μ g/L), 03/10/2009 (3.5 μ g/L), 03/10/2008 (3.5 μ g/L), and 04/09/2007 (3.5 μ g/L). Sampling conducted at Well 1 on 05/01/2009 resulted in the detection of MTBE at 3.32 μ g/L. Historical MTBE detections from previous sampling events include samples collected on 04/26/2006 (4.5 μ g/L), 07/06/2006 (7.2 μ g/L), 11/01/2006 (5.9 μ g/L), 4/09/2007 (3.2 μ g/L), 3/10/2008 (3.3 μ g/L), 3/23/2009 (μ g/L), and 12/07/2009 (2.4 μ g/L).

3.4 Hazards at the Site

The main hazards that may be encountered by a visitor at the Texas Molecular facility are as follows:

Wastewaters

Wastewaters that are classified as D001, D002, D003 (Flammable, Corrosive, Cyanides, and Sulfides) and wastewaters that consist of metals and pesticides.

Gases, vapors, dust and fumes

Exposure to gases and vapors can result in various adverse health effects, such as respiratory irritation, asthma and watery eyes.

Physical Hazards

Physical hazards also exist and include but are not limited to: trip hazards where the ground may be uneven or where objects protrude or are hidden.

Personnel performing inspections shall be required to wear protective equipment as specified in Section 5.2. Personnel should be aware that protective equipment limits dexterity and visibility, and places a physical strain on the wearer. Heat and cold stress injuries are always a possibility in hazardous waste work and field work in general. Refer to Attachment A for Heat and Cold Stress information.

4 Health and Safety Directives

4.1 General Health and Safety Requirements

Only personnel who have completed and are current with the 40-hour Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) and have participated in the TCEQ Medical Monitoring Program per OSHA requirements will be allowed on the site. No eating, drinking, smoking, or any other activity involving hand-to-mouth contact will be permitted while onsite.

4.2 Personnel Protective Equipment

The following minimum personal protective equipment will be worn during on-site inspection:

Level "D" Protection: tyvek coveralls (professional judgement), neoprene, PVC, or leather steel-toe work boots, optional inner vinyl or latex surgical gloves, outer neoprene or other chemical compatible work glove (as appropriate), safety glasses, goggles or face mask (as appropriate), ear plugs (as appropriate) and hard hat (as appropriate).

This HASP addresses anticipated activities for the performance of a Pre-CERCLIS site inspection only. If any situation arises requiring a PPE upgrade from the standard Level "D" protection, TCEQ personnel will evacuate the property immediately.

4.3 Documentation

Implementation of the provisions of this HASP will be recorded in the field log book. Information to be recorded shall include but is not limited to: weather conditions, personnel on-site, levels of protection worn, monitoring/screening instrument readings, subjects discussed during site health and safety briefings, and safety violations.

5 Air Monitoring

No potential hazards related to vapor emissions are anticipated as can be determined from process knowledge, and therefore, no air monitoring will be conducted.

However, should vapor emissions of any kind be observed, TCEQ personnel shall evacuate the site immediately. Any observations of vapor emissions will be recorded in the field log book.

6 Emergency Response Procedures

In the event of an emergency situation arising such as injury, illness or fire, the appropriate immediate response must be taken by the first person to recognize the situation. If the site is evacuated, all TCEQ personnel shall travel to the designated rally point. This designated rally point will be identified by the Site Safety Officer during the site safety briefing.

First-aid equipment will be available on-site and personnel will keep them close at hand.

Emergency contacts and a route to the hospital will be discussed by the Site Health and Safety Officer during the site safety briefing prior to entering the site. This HASP shall be available in the field during site activities and its location known to all participating personnel.

7 EPA Notification of Imminent Danger

If an imminent danger to human health and/or the environment is discovered during this site inspection from hazardous substances or wastes, or other site conditions, the Project Manager will notify the Program Manager who will notify the EPA no later than 24 hours after the inspection team returns from the site visit. Written notification will follow any verbal communication in this regard.

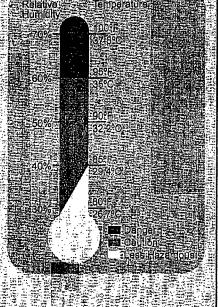
Attachment A Heat and Cold Stress



The Heat Equation

HIGH TEMPERATURE + HIGH HUMIDITY + PHYSICAL WORK = HEAT ILLNESS

When the body is unable to coolitself through sweating, serious heat illnesses may occur. The most severe heatinduced illnesses are heat exhaustion and heat stroke. If left untreated: heat exhaustion could progress to heat stroke and possible death...



Heat Exhaustion

What are the symptoms?

HEADACHES; DIZZINESS OR LIGHTHEADEDNESS; WEAKNESS; MOOD CHANGES SUCH AS IRRITABILITY, CONFUSION, OR THE INABILITY TO THINK STRAIGHT; UPSET STOMACH; VOMITING; DECREASED OR DARK-COLORED URINE; FAINTING OR PASSING OUT; AND PALE, CLAMMY SKIN

What should you do?

- Act immediately. If not treated, heat exhaustion may advance to heat stroke or death.
- Move the victim to a cool, shaded area to rest. Don't leave the person alone. If symptoms include dizziness or lightheadedness, lay the victim on his or her back and raise the legs 6 to 8 inches. If symptoms include nausea or upset stomach, lay the victim on his or her side.
- · Loosen and remove any heavy clothing.
- Have the person drink cool water (about a cup every 15 minutes) unless sick to the stomach.
- Cool the person's body by fanning and spraying with a cool mist of water or applying a wet cloth to the person's skin.
- Call 911 for emergency help if the person does not feel better in a few minutes.

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Heat Stroke-A Medical Emergency

What are the symptoms?

DRY, PALE SKIN WITH NO SWEATING; HOT, RED SKIN THAT LOOKS SUNBURNED; MOOD CHANGES SUCH AS IRRITABILITY, CONFUSION, OR THE INABILITY TO THINK STRAIGHT; SEIZURES OR FITS; AND UNCONCIOUSNESS WITH NO RESPONSE

What should you do?

- Call 911 for emergency help immediately.
- Move the victim to a cool, shaded area. Don't leave the
 person alone. Lay the victim on his or her back. Move any
 nearby objects away from the person if symptoms include
 seizures or fits. If symptoms include nausea or upset
 stomach, lay the victim on his or her side.
- · Loosen and remove any heavy clothing.
- Have the person drink cool water (about a cup every 15 minutes) if alert enough to drink something, unless sick to the stomach.
- Cool the person's body by fanning and spraying with a cool mist of water or wiping the victim with a wet cloth or covering him or her with a wet sheet.
- Place ice packs under the armpits and groin area

How can you protect yourself and your coworkers?

- Learn the signs and symptoms of heat-induced illnesses and how to respond.
- ■=Train your workforce about heat induced illnesses.
- Perform the heaviest-work during the coolest part of the day.
- Build up tolerance to the heat and the work activity slowly.
 This usually takes about 2 weeks.
- Use the buddy system with people working in pairs.
- Drink plenty of cool-water about a cup every 15 to 20 minutes
- Wear light, loose litting, breathable clothing, such as cotton.
- Take frequent, short breaks in cool, shaded areas to allow the body to cool down.
- Avoid eating large meals before working in hot environments.
- Avoid-alcohol-or beverages with caffeine. These make the body lose water and increase the risk for heat illnesses.

What factors put you at increased risk?

- Taking certain medications. Check with your health-care provider or pharmacist to see if any medicines you are taking affect you when working in hot environments.
- Having a previous heat-induced illness.
- Wearing personal protective equipment such as a crespirator or protective suit.

THE COLD STRESS EQUATION



LOW TEMPERATURE + WIND SPEED + WETNESS = INJURIES & ILLNESS

When the body is unable to warm itself, serious coldrelated illnesses and injuries may occur, and permanent tissue damage and death may result. Hypothermia can occur when land temperatures are above freezing or water temperatures are below 98.6°F/ 37°C. Coldrelated illnesses can slowly overcome a person who has been chilled by low temperatures, brisk winds, or wet clothing.

Wind Speed (MPH) Little Dange ((Caution)) reezide (os Exposed elest) 125 willow (Heber Danger ineezingitoiexposed SwiffineleMinute 209 W 28 9 Extreme Danger within 30 Seconds daptes/from/ACGIH

U.S. Department of Labor Occupational Safety and Health Administration

OSHA 3156

FROST BITE

What Happens to the Body:

FREEZING IN DEEP LAYERS OF SKIN AND TISSUE; PALE, WAXY-WHITE SKIN COLOR; SKIN BECOMES HARD and NUMB; USUALLY AFFECTS THE FINGERS, HANDS, TOES, FEET, EARS, and NOSE.

What Should Be Done: (land temperatures)

- Move the person to a warm dry area. Don't leave the person alone.
- Remove any wet or tight clothing that may cut off blood flow to the affected area.
- DO NOT rub the affected area, because rubbing causes damage to the skin and tissue.
- **Gently** place the affected area in a warm (105°F) water bath and monitor the water temperature to **slowly** warm the tissue. Don't pour warm water directly on the affected area because it will warm the tissue too fast causing tissue damage. Warming takes about 25-40 minutes.
- After the affected area has been warmed, it may become puffy and blister.
 The affected area may have a burning feeling or numbness. When normal
 feeling, movement, and skin color have returned, the affected area should be
 dried and wrapped to keep it warm. Note: If there is a chance the affected
 area may get cold again, do not warm the skin. If the skin is warmed and
 then becomes cold again, it will cause severe tissue damage.
- Seek medical attention as soon as possible.

HYPOTHERMIA - (Medical Emergency)

What Happens to the Body:

NORMAL BODY TEMPERATURE (98.6° F/37°C) DROPS TO OR BELOW 95°F (35°C); FATIGUE OR DROWSINESS; UNCONTROLLED SHIVERING; COOL BLUISH SKIN; SLURRED SPEECH; CLUMSY MOVEMENTS; IRRITABLE, IRRATIONAL OR CONFUSED BEHAVIOR.

What Should Be Done: (land temperatures)

- Call for emergency help (i.e., Ambulance or Call 911).
- Move the person to a warm, dry area. Don't leave the person alone. Remove any
 wet clothing and replace with warm, dry clothing or wrap the person in blankets.
- Have the person drink warm, sweet drinks (sugar water or sports-type drinks) if they
 are alert. Avoid drinks with caffeine (coffee, tea, or hot chocolate) or alcohol.
- Have the person move their arms and legs to create muscle heat. If they are unable
 to do this, place warm bottles or hot packs in the arm pits, groin, neck, and head
 areas. DO NOT rub the person's body or place them in warm water bath. This may
 stop their heart.

What Should Be Done: (water temperatures)

- Call for emergency help (Ambulance or Call 911). Body heat is lost up to 25 times faster in water.
- DO NOT remove any clothing. Button, buckle, zip, and tighten any collars, cuffs, shoes, and hoods because the layer of trapped water closest to the body provides a layer of insulation that slows the loss of heat. Keep the head out of the water and put on a hat or hood.
- Get out of the water as quickly as possible or climb on anything floating. DO NOT
 attempt to swim unless a floating object or another person can be reached because
 swimming or other physical activity uses the body's heat and reduces survival time
 by about 50 percent.
- If getting out of the water is not possible, wait quietly and conserve body heat by folding arms across the chest, keeping thighs together, bending knees, and crossing ankles. If another person is in the water, huddle together with chests held closely.

How to Protect Workers

- Recognize the environmental and workplace conditions that lead to potential cold-induced illnesses and injuries.
- Learn the signs and symptoms of cold-induced illnesses/injuries and what to do to help the worker.
- Train the workforce about cold-induced illnesses and injuries.
- Select proper clothing for cold, wet, and windy conditions. Layer clothing
 to adjust to changing environmental temperatures. Wear a hat and gloves, in
 addition to underwear that will keep water away from the skin (polypropylene).
- Take frequent short breaks in warm dry shelters to allow the body to warm up.
- Perform work during the warmest part of the day.
- Avoid exhaustion or fatigue because energy is needed to keep muscles warm.
- Use the buddy system (work in pairs).
- Drink warm, sweet beverages (sugar water, sports-type drinks). Avoid drinks with caffeine (coffee, tea, or hot chocolate) or alcohol.
- Eat warm, high-calorie foods like hot pasta dishes.

Workers Are at Increased Risk When...

- They have predisposing health conditions such as cardiovascular disease, diabetes, and hypertension.
- They take certain medication (check with your doctor, nurse, or pharmacy and ask if any medicines you are taking affect you while working in cold environments).
- They are in poor physical condition, have a poor diet, or are older.

Attachment B Health and Safety Checklist

Health and Safety Checklist

_ 1	. Safety briefing				
2	. Initial site survey				
3	. PPE: Tyvek coveralls, boots, inner and outer g canisters, hard hat, goggles and tape	loves, resp	irator, or	ganic and part	iculate filter
4	Field Inspection equipment: watch field necessaries reconnaissance checklist, camera, steel measures		-	-	l pens, PA
5	. First aid and snakebite kits				
_ 6	. Water				
_ 7	. Emergency contact list and map to hospital		:		
8	. Weather gear: rain gear, cold weather gear, e	tc.		•	



Reference 1

U.S. Environmental Protection Agency. Improving Site Assessment Pre-CERCLIS Screening Assessments, EPA-540-F-98-039; OSWER 9375.2-11FS;PB98-983310; October 1999. 4 pages.

United States Environmental Protection Agency Office of Solid Waste and Emergency Response

EPA-540-F-98-039 OSWER 9375.2-11FS PB98-963310 October 1999

\$EPA

Improving Site Assessment: Pre-CERCLIS Screening Assessments

Office of Emergency and Remedial Response Site Assessment Team

Quick Reference Guidance Series

ABSTRACT

Pre-CERCLIS screening is a review of information on potential Superfund sites to determine whether the site should be entered into EPA's Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS). Pre-CERCLIS screening is an initial low-cost look at potential sites to ensure that uncontaminated sites or sites ineligible under CERCLA are not unnecessarily entered into CERCLIS for further Superfund-financed assessment activities. This guidance document establishes minimum requirements for conducting pre-CERCLIS screening assessments and supplements existing pre-CERCLIS screening guidance.

BACKGROUND

All sites brought to the Agency's attention should be screened before we enter them into CERCLIS (OERR Directive # 9200.4-05, *Pre-CERCLIS Screening Guidance*, September 30, 1996)¹. Pre-CERCLIS screening is the process of reviewing data on a potential site to determine whether it should be entered into CERCLIS for further evaluation. EPA is required to further assess risks to human health and the environment posed by sites entered into CERCLIS and to determine whether Federal response action (e.g., removal action, remedial action, oversight) is warranted. Pre-CERCLIS screening minimizes the number of sites unnecessarily entered into CERCLIS by providing a cost efficient mechanism for screening sites.

The pre-CERCLIS screening process begins when you are informed of a new site by a phone call or referral from State, Tribal or other Federal agency staff. The designated site investigator (regional, State, or Tribal staff or contractor) will complete the attached Pre-CERCLIS Screening Assessment Checklist/Decision Form (Attachment A), or equivalent documentation, to provide site information on deciding whether entry of the site into CERCLIS is warranted. If equivalent documentation is used, it must address the information requested in Attachment A. Only enter sites that

require further Superfund assessment/response into CERCLIS. Information about sites deemed inappropriate for CERCLIS entry should be maintained for possible future reference and retrieval to avoid duplication of effort.

WHY USE PRE-CERCLIS SCREENING?

Pre-CERCLIS screening prevents unnecessary entry of sites into CERCLIS (e.g., uncontaminated sites, sites ineligible under CERCLA, or sites not requiring Federal Superfund response actions). Federal Agencies and States conducting CERCLA site assessments should consult with the EPA Regional Office prior to initiating Pre-CERCLIS screening to ensure that sufficient data will be collected to make an appropriate decision about the site.

HOW WILL PRE-CERCLIS SCREENING BE IMPLEMENTED?

The standard procedures for implementing pre-CERCLIS screening activities are presented below.

Who Will Fund Pre-CERCLIS Activities?

EPA Headquarters provides funding to EPA Regions for Superfund site assessment activities through an Advice of Allowance (AOA) as described in the Superfund Program Implementation Manual. These funds may be used to conduct pre-CERCLIS screening work; however, Regions need to balance the amount of funds used for pre-CERCLIS screenings with funding needs for other site assessment activities.

You may implement pre-CERCLIS screening activities through three primary mechanisms:

- (1) Funding States and Tribes through site or multi-site assessment cooperative agreements;
- Funding Federal contractors (e.g., through START contracts); and
- (3) Using EPA regional staff.

EPA regions should specify pre-CERCLIS screening activities in the statements of work associated with site/multisite assessment cooperative agreements and with Federal contract work assignments as appropriate.

What Are Regional Staff Responsibilities?

Regional site assessment staff are responsible for reviewing screening reports for completeness and for ensuring that appropriate sites are entered into CERCLIS. A completed *Pre-CERCLIS Screening Assessment Checklist/Decision Form* (see Attachment A) or equivalent documentation as referenced above can serve as a final report for a site. The decision to enter or not enter a site into CERCLIS should be based on current information. If new information becomes available on a site that was not entered, you may reconsider the decision.

Site investigators should collect enough data to complete the *Pre-CERCLIS Screening Assessment Checklist/Decision Form* (see Attachment A). From the time of initial notification of a potential site, the site investigator should review the information to evaluate the need for additional assessment and entry into CERCLIS. See specific information requirements identified in the checklist. If more site information is available, the site investigator should examine the information at this time. The information collection/screening process is normally limited to one or two days. If the site is placed in CERCLIS, EPA will use the gathered information in the next step of the site evaluation (e.g., Preliminary Assessment (PA)², Abbreviated Preliminary Assessment (APA)³, or Combined PA/SI⁴).

What Are The Screening Criteria?

To make a CERCLIS entry decision, site investigators need to gather enough data to address the screening criteria below.

These criteria are primarily based on OERR Directive # 9200.4-05.

A site should not be entered into CERCLIS if:

 The site is currently in CERCLIS, or has been removed from CERCLIS and no new data warrant CERCLIS entry. Determine whether the site has previously been evaluated under the Federal Superfund Program to avoid entering a duplicate site record into CERCLIS. Check CERCLIS and archive data for previous entries of a site using site name, location, and site identification number data.

Note: Sites already in CERCLIS with no work started may warrant CERCLIS screening as part of an APA. (See the guidance document titled, Improving Site Assessment: Abbreviated Preliminary Assessments³ for more information on conducting APAs.)

- The site and some contaminants are subject to certain limitations based on definitions in CERCLA. This includes cases where the release is:
 - Of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found;
 - (2) From products that are part of the structure of, and result in exposure within, residential buildings or business or community structures; or
 - (3) Into public or private drinking water supplies due to deterioration of the system through ordinary use.
- A State or Tribal remediation program is involved in response at a site that is in the process of a final cleanup (e.g., a State Superfund program, State voluntary clean-up program, and State or local Brownfields programs).

During the screening process, a file search of other Agency programs eliminates sites where other programs are actively involved. Based on the search of the geographical location of the site and the site name, conduct the search using current databases or telephone calls to staff of other potentially involved programs. You, in consultation with State and Tribal program representatives, are responsible for determining whether another program is actively involved with the site.

When another program with sufficient investigation, enforcement, and remediation resources is actively

involved with a site, postpone a decision on CERCLIS entry until all actions have been completed. EPA is responsible for determining if the actions are sufficient and will then determine whether any further Superfund involvement is warranted.

The hazardous substance release at the site is regulated under a statutory exclusion (e.g., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or covered by the Nuclear Regulatory Commission (NRC), and Uranium Mill Tailings Radiation Control Act (UMTRCA), see CERCLA Section 101(22).

If entry into CERCLIS is not warranted due to statutory exclusion, the site data should be sent to the appropriate Federal and State/Tribal program for possible future follow-up. You should confirm notification of sites referred to other programs.

 The hazardous substance release at the site is deferred by policy considerations (e.g., RCRA Corrective Action). Refer to the Regional QC Guidance for NPL Candidate Sites⁵ for more examples.

The site investigator should, at a minimum, search other current EPA data sets using site identification data (name and location) to determine whether the site is already being addressed by other authorities.

The NPL/RCRA deferral policy states that sites should not be placed on the NPL if they can be addressed under RCRA Subtitle C corrective action authorities. However, according to the NPL/RCRA policies published June 10, 1986 (51 FR 21057), June 24, 1988 (53 FR 23978), and October 4, 1989 (54 FR 41000), facilities that are subject to RCRA Subtitle C may be listed on the NPL when corrective action is unlikely to succeed or occur promptly, as in the following situations: (1) inability to finance, (2) unwillingness/loss of authorization to operate, (3) unwillingness/case-by-case determination, converters, non- or late filers, (5) pre-HSWA (Hazardous and Solid Waste Amendments) permittees, and (6) when not all of the release from the facility is covered by RCRA corrective action.

Site data are insufficient to determine CERCLIS entry (i.e., based on potentially unreliable sources or with no information to support the presence of hazardous substances or CERCLA-eligible pollutants and contaminants).

If you are presented with incomplete pre-CERCLIS screening information or with what appears to be unreliable data for a site, you should identify the data deficiencies and forward these data needs to the site investigator for further data collection. Refer to the attached pre-CERCLIS screening checklist for minimum required site information. When it is not feasible to obtain all the information to complete the checklist, use professional judgement when deciding to place a site in CERCLIS.

There is sufficient documentation that clearly demonstrates that there is no potential for a release that could cause adverse environmental or human health impacts (e.g., comprehensive remedial investigation equivalent data showing no release above applicable or relevant and appropriate requirements (ARARs), completed removal action of all sources and releases, documentation showing that no hazardous substance releases have occurred, or a completed EPA approved risk assessment showing no risk).

You should communicate CERCLIS site entry decisions to States and Tribes on a regular basis.

Does Pre-CERCLIS Screening Apply To Citizen-Petitioned Sites?

Citizen-petitioned sites are eligible for pre-CERCLIS screening assessments and must meet the same criteria. According to Section 105(d) of CERCLA, EPA must perform a PA or provide an explanation for why the PA was not appropriate within 12 months of receiving the petition. The *Pre-CERCLIS Screening Assessment Checklist/Decision Form* (see Attachment A) or equivalent documentation may be used to support the decision to enter the site into CERCLIS and perform a PA or to explain to the petitioner why a PA is not appropriate.

How Will Information be Managed?

See the Superfund Program Implementation Manual for procedures on managing pre-CERCLIS screening information in the Superfund data system.

REFERENCES

- U.S. Environmental Protection Agency, September 1996. Pre-CERCLIS Screening Guidance. Office of Solid Waste and Emergency Response. Directive # 9200.4-05.
- U.S. Environmental Protection Agency, September 1991. Guidance for Performing Preliminary Assessments Under CERCLA. Office of Solid Waste and Emergency Response. Publication 9345.0-01A.

- 3. U.S. Environmental Protection Agency, October 1999. Quick Reference Guidance Series Improving Site Assessment: Abbreviated Preliminary Assessments. Publication OSWER 9375.2-09FS.
- 4. U.S. Environmental Protection Agency, October 1999. Quick Reference Guidance Series *Improving Site Assessment: Combined PA/SI Assessments*. Publication OSWER 9375.2-10FS.
- U.S. Environmental Protection Agency, December 1991. Regional Quality Control Guidance for NPL Candidate Sites. Office of Solid Waste and Emergency Response. Publication 9345.1-08.

FOR MORE INFORMATION

For more information on pre-CERCLIS screening activities, please contact Randy Hippen at EPA Headquarters, phone (703) 603-8829 or e-mail at hippen.randy@epa.gov.

Reference 2

Harris County Appraisal District. Real Property Account
Information. Account #0440990010057,
#0410020050013, #0440990010111, and
#9840000110003. Parcel Map. Facet 6056B, Quadrant
#2, #3,#6, and #7. Accessed April 1, 2011. 8 page.

Friday, April 01, 2011

Tax Year: 2011

HARRIS COUNTY APPRAISAL DISTRICT REAL PROPERTY ACCOUNT INFORMATION 0440990010057

Print E E-mail

Ownership History | Fiduciary Information

Owner and Property Information

Owner Name &

TM DEER PARK SERVICES LP

Mailing Address: PO BOX 1914

DEER PARK TX 77536-1914

Legal Description: TR 4N-2

ABST 646 G ROSS

Property Address:

2525 BATTLEGROUND RD LA PORTE TX 77571

State Class Code

Land Use Code

Building Class

Total Units

F2 -- Real, Industrial

4416 -- Chemical and Allied

E

0

Products

0

Land Area Building Area Net Rentable Area Neighborhood 5982.12

Neighborhood Group Market Area Map Facet Key Map®

499W

109,810 SF

Value Status Information

Capped Account

Value Status

Shared CAD

Pending

All Values Pending

Nο

Exemptions and Jurisdictions

Exemption Type	Districts	Jurisdictions	ARB Status	2010 Rate	2011 Rate	Online Tax Bill
None	002	DEER PARK ISD	Pending	1.396700		View
	040	HARRIS COUNTY	Pending	0.388050		View
	041	HARRIS CO FLOOD CNTRL	Pending	0.029230		
	042	PORT OF HOUSTON AUTHY	Pending	0.020540		
	043	HARRIS CO HOSP DIST	Pending	0.192160		
	044	HARRIS CO EDUC DEPT	Pending	0.006581		
	047	SAN JACINTO COM COL D	Pending	0.176277		

Valuations

Value as of January 1, 2010

Value as of January 1, 2011

Market

Appraised

Market

Appraised

Land

115,301 1,325,560

Land Improvement

Improvement Total

1,440,861

1,440,861 Total

Pending

Pending

5-Year Value History

Land

Market Value Land

O/R

Site Unit Line Description Code Type

Appr Size Site Factor Factor

Appr O/R

Total Unit Price Unit

Value

4416 ---Chemical 109,810 1.00 1.00 0.70 Shape/Sz&Rstr/NonConf 0.70 Pending Pending Pending

Factor

Reason

Adj

Price

and Allied Products

Building

Monday, April 04, 2011

Tax Year: 2011

HARRIS COUNTY APPRAISAL DISTRICT REAL PROPERTY ACCOUNT INFORMATION 0410020050013

Print E E-mail

Ownership History | Fiduciary Information

Owner and Property Information

Owner Name &

TM DEER PARK SERVICES LP

Mailing Address: PO BOX 1914

DEER PARK TX 77536-1914

Legal **TR 1Y** Description:

ABST 46 A MCCORMICK

Property Address: **0 BATTLEGROUND RD LA PORTE TX 77571**

State Class Code

Land Use Code

Building Class

Total Units

D2 -- Real, Unqualified

4300 -- General Commercial

0

Agricultural Land

Vacant

Building Area Net Rentable Area Neighborhood Neighborhood Group Market Area Map Facet Key Map®

Land Area 635,976 SF

9001.04

499W

Value Status Information

Capped Account No

Value Status Noticed

Notice Date

Shared CAD

04/15/2011

No

Exemptions and Jurisdictions

Exemption Type	Districts	Jurisdictions	ARB Status	2010 Rate	2011 Rate Online
None	002	DEER PARK ISD	Not Certified	1.396700	Vlew
	040	HARRIS COUNTY	Not Certified	0.388050	View
	041	HARRIS CO FLOOD CNTRL	Not Certified	0.029230	
	042	PORT OF HOUSTON AUTHY	Not Certified	0.020540	
	043	HARRIS CO HOSP DIST	Not Certified	0.192160	
	044	HARRIS CO EDUC DEPT	Not Certified	0.006581	
	047	SAN JACINTO COM COL D	Not Certified	0.176277	

Valuations

•	Value as of January 1, 2010		Value as of January 1, 2011				
	Market	Appraised	Market	Appraised			
Land	638,154	Land	638,154				
Improvement	0	Improvement	. 0				
Total	638,154	638,154 Total	638,154	638,154			
		5-Year Value History					

Land

Market Value Land

Line	Description		Unit Type	Units	Size Factor	Site Factor	Appr O/R Factor	Appr O/R Reason	Total Adj	Unit Price	Adj Unit Price	Value
1	4300 General Commercial Vacant	AC0	AC	10.0000	1.00	1.00	0.90		0.90	65,340.00	58,806.00	588,060
2	4300 General Commercial Vacant	AC8	AC	4.6000	1.00	1.00	0.50		0.50	21,780.00	10,890.00	50,094

Building

Page 1 of 1

Friday, April 01, 2011

Tax Year: 2011

HARRIS COUNTY APPRAISAL DISTRICT REAL PROPERTY ACCOUNT INFORMATION 0440990010111

□ Print □ E-mail

Ownership History

Owner and Property Information

Owner Name & Mailing Address: **TEXAS MOLECULAR LLC**

% DONNA RATLIFF PO BOX 1914

DEER PARK TX 77536-1914

Legal TR 4N-2 & 4N-3 Description:

CITY OF DEER PARK IND DIST (PARENT*044099001057 &

0109)

ABST 646 G ROSS

Property Address: 2525 BATTLEGROUND RD DEER PARK TX 77536

State Class Code

Land Use Code

Equipment

Building Class

Total Units

F2 -- Real, Industrial

4422 -- Machinery & Transportation

0

Land Area Building Area

Net Rentable Area

0

5982.12

Neighborhood Neighborhood Group Market Area Map Facet Key Map®

4027

6056B ·

179,732 ŚF

Value Status Information

Capped Account

Value Status

Shared CAD

Pending

All Values Pending

No

Exemptions and Jurisdictions

Exemption Type

Districts

Jurisdictions

ARB Status

0

2010 Rate

2011 Rate

Online Tax Bill

None

954

CITY OF DEER PARK IND

Pending

0.000000

View

Valuations

Value as of January 1, 2010

Appraised

Value as of January 1, 2011

Market

Appraised

Land

Market 80,880

Land

Improvement

Improvement

Total

80,880

80,880 Total

Pending

Pending

5-Year Value History

Land

Market Value Land

Line Description

Site Unit Code Type

Size Site Units Factor Factor

Appr Appr Total O/R O/R Adj Factor Reason

Unit Price

Unit Value Price

1 4422 -- Machinery & Transportation Equipment AC6 AC 4.1261 1.00 1.00

0.90 or Size

Shape 0.90 Pending Pending Pending

Building

(No Building Data)

Friday, April 01, 2011

Tax Year: 2011

HARRIS COUNTY APPRAISAL DISTRICT REAL PROPERTY ACCOUNT INFORMATION 9840000110003

Print E-mail

Ownership History | Fiduciary Information

Owner and Property Information

Owner Name & Mailing Address:

TEXAS MOLECULAR LLC % DONNA RATLIFF PO BOX 1914

DEER PARK TX 77536-1914

Legal Description: TRS 4N-2 & 4N-3

CITY OF DEER PARK IND DIST (PARENT*0440990010057 &

0109)

ABST 646 G ROSS

Property Address:

2525 BATTLEGROUND RD **DEER PARK TX 77536**

State Class Code

Land Use Code

Building Class

Total Units

F2 -- Real, Industrial

4422 -- Machinery & Transportation Equipment

E

0

Land Area Building Area

Net Rentable Area

Neighborhood

Neighborhood Group Market Area Map Facet Key Map®

0 269,597

9000

n

6056B 499S

SF

Value Status Information

Capped Account

Value Status

Shared CAD

Pending

All Values Pending

No

Exemptions and Jurisdictions

Exemption Type Districts Jurisdictions

ARB Status

2010 Rate

Online

2011 Rate Tax Bill

View

None

954 CITY OF DEER PARK IND Pending

0.000000

Valuations

Value as of January 1, 2010

Value as of January 1, 2011

Land

Market Appraised

Market Appraised

Improvement

121,319

Land

Improvement

Total

121,319

121,319 Total

Pending

5-Year Value History

Land

Market Value Land

Line Description

Site Unit Code Type

Size Site Factor Factor

1.00

Appr Appr O/R O/R Factor Reason

Unit Total

Adj Unit Value Price

1 4422 -- Machinery & Transportation Equipment AC6 AC 6.1891 1.00

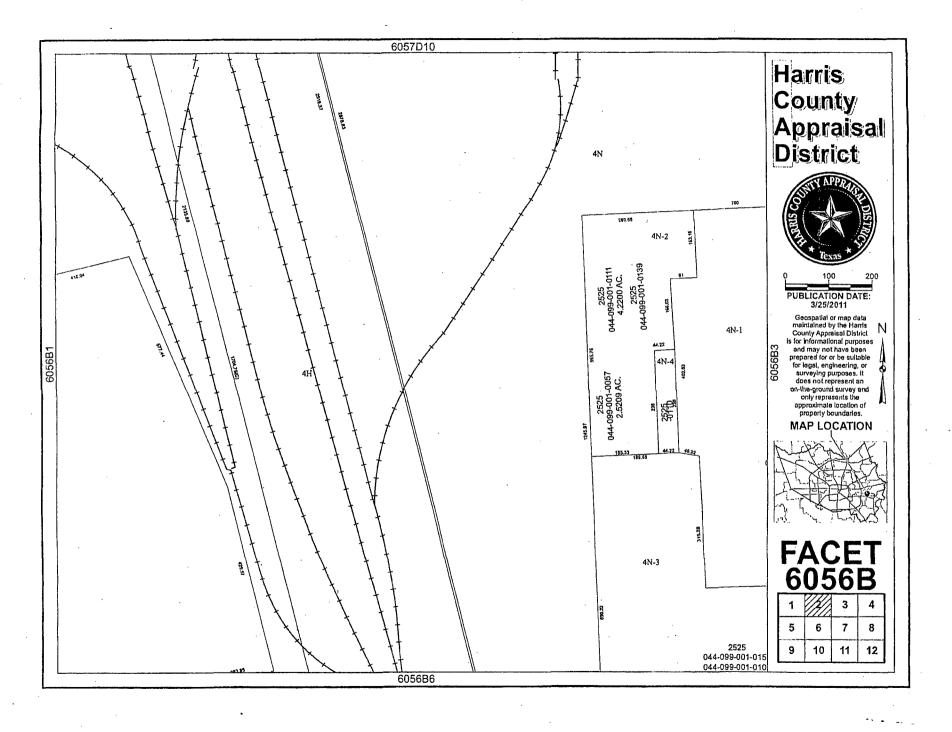
0.90

Shape 0.90 Pending Pending Pending or Size

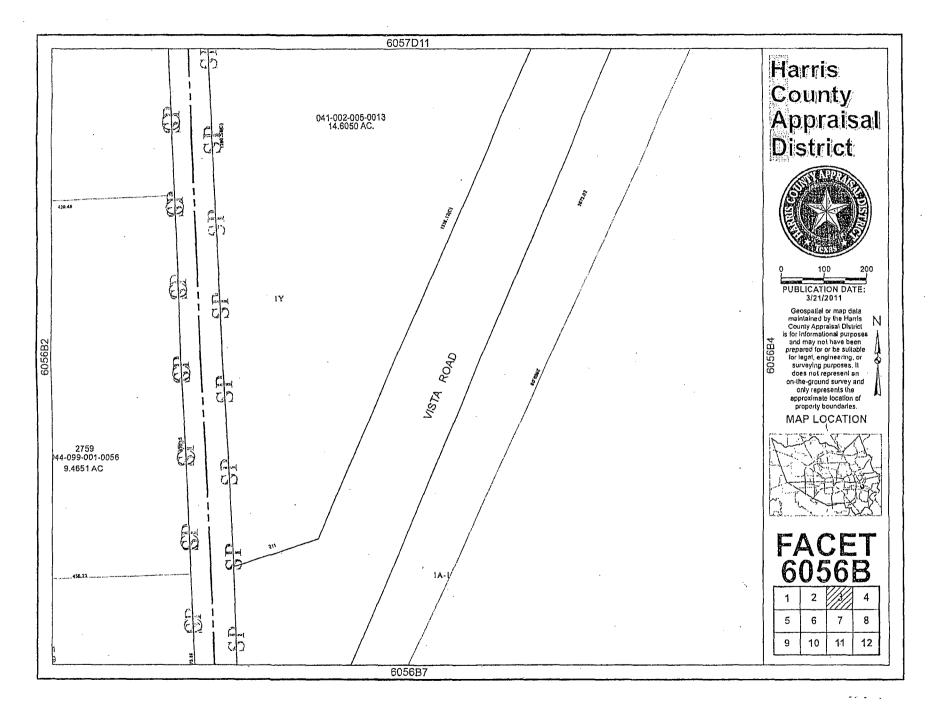
Pending

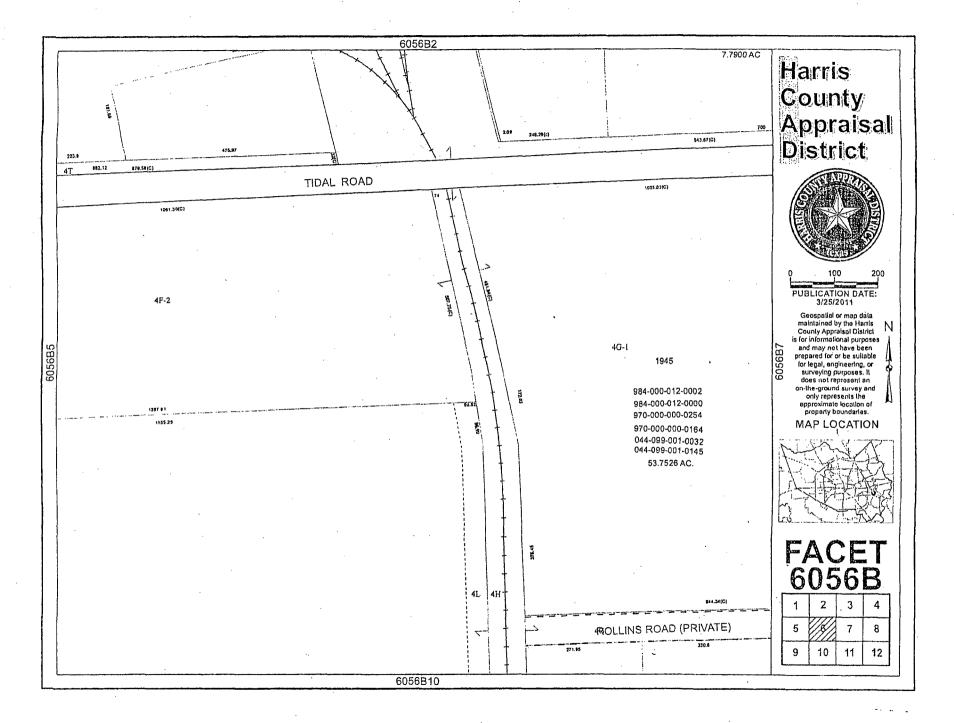
Building

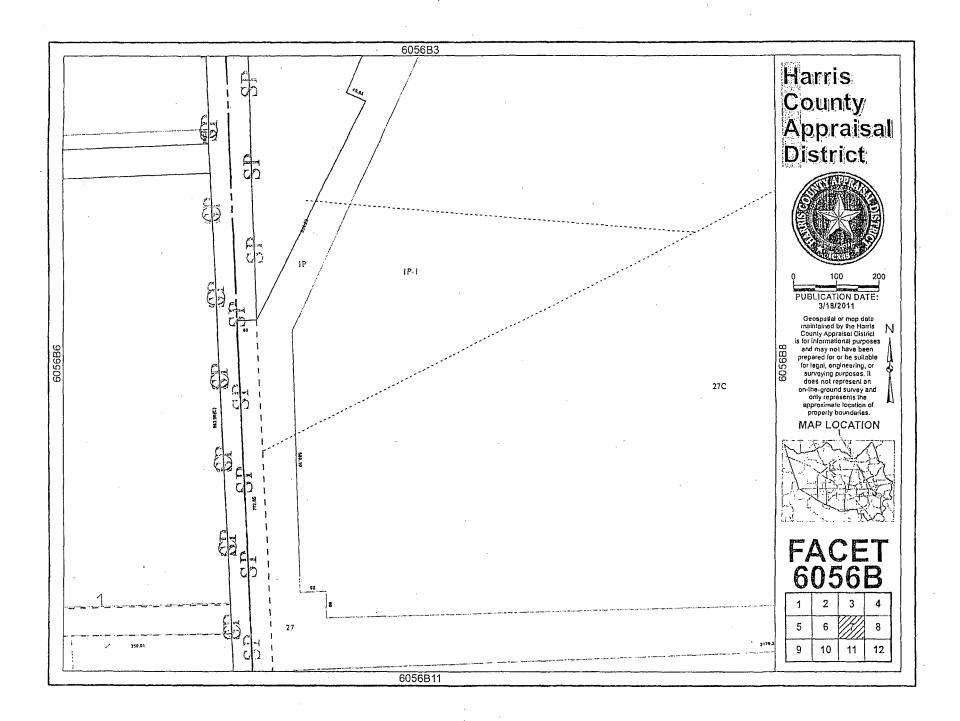
(No Building Data)



0.1







Reference 3 Google Earth TM. Imagery date January 4, 2010. Accessed November 23, 2009. 1 page. Available: www.google.com

Deer Park High School 6.

Deer Park High School 8.

Deer Park High Sch

01

Reference 4

GNI Waste Management Services (formerly DSI). The GNI Group. Deer Park, Texas. Accessed April 4, 2011.
3 pages. Available:

http://www.facilityreview.com/Site%20Profiles%20ae/DSI-GNI.htm

GNI Waste Management Services (formerly DSI) The GNI Group Deer Park, Texas

Company Profile

The GNI Group, Inc. (GNI) was recently purchased by the investment group, 399 Venture Partners, Inc. (a subsidiary of Citicorp). Until recently, The GNI Group was a publically traded company, however, The GNI Group is now privately held and is headquartered in Deer Park, Texas. GNI management retains a 15 percent stake in the company. GNI operates five wholly owned subsidiaries, four of which are located at the Deer Park plant. These subsidiaries include Disposal Systems, Inc. (DSI), Disposal Systems of Corpus Christi (DSCCI) GNI Chemical Corporation (GNIC), GNI Technical Services, and Resource Transportation Services, Inc. (RTS). DSI offers hazardous and nonhazardous waste treatment, storage, and disposal services centered around the facility's two (2) onsite deepwells. GNIC processes and manufactures chemicals from hazardous and nonhazardous waste streams and performs toll processing of chemical streams. GNI Technical Services manages government contracts and field service projects. RTS provides transportation and remedial support services for GNIC and DSI. The fourth subsidiary, Disposal Systems of Corpus Christi, Inc., another deepwell injection facility, was purchased in 1995 from Chemical Waste Management, Inc. and is located in Corpus Christi, Texas. These operations make up the family of companies managed by The GNI Group.

Site Profile

Disposal Systems, Inc. is located on a ten (10) acre site at 2525 Battleground Road in Deer Park, Texas. The site was permitted in 1980 as a deepwell injection facility. Interim status for RCRA activities was granted by rule. A Part B Application was submitted in 1983 and granted in August 1992. The facility offers multifaceted service including transportation, processing, disposal, treatment, and organic recycling/reclamation. Disposal Systems, Inc. accepts a broad variety of wastes that are liquid, semisolid, or solid. The only prohibited wastes are PCBs, dioxins, radioactives, and explosives.

The GNI Group, Inc. has approximately 160 employees, 60 of which work directly for Disposal Systems, Inc. The technical support staff is composed of chemical and electrical engineers, chemists, biologists, environmental scientists, as well as other disciplines commensurate with a management organization. Transportation services are provided through a sister company, Resource Transportation Services, Inc. (RTS). RTS operates a specialized fleet of nineteen tractors, and 30 vacuum and stainless steel tankers. The fleet is augmented through a lease operator.

Waste Management Methods

The facilities waste processing capabilities include:

- Container processing via drum, roll-off, or tank truck.
- Two injection disposal wells. Waste material with a pH from zero to fourteen can be processed and injected without neutralization.
- Two levels of emulsion treatment for processing emulsion streams: one system for easily separated emulsions, and a more advanced system that treats the difficult-to-process streams.
- Organic material processing in the fuel blending system for use as alternative fuel, typically in

cement kilns.

• Solids and sludges stabilization in the container processing facility for ultimate disposal at appropriate facilities, either land disposal or incineration.

Hazardous waste management units currently approved at the facility include:

- Seven container storage areas with a capacity of 383,350 gallons (6,970 55-gallon drums);
- Five tank farms which include 57 tanks with a capacity of 2,218,920 gallons;
- Nine filters with a capacity of 33,860 gallons; and
- Two, 30-cubic yard roll-off containers.

Authorized Waste

The DSI facility is permitted to accept a wide range of waste materials for either disposal by deepwell injection or for transshipment to an approved TSDF. These waste include:

- Used Filter Aid
- Filter Cartridges
- Sludge Containing Heavy Metals
- Mixed Acid Wastes
- Oils and Solvents
- Hazardous Waste from Specific Sources
- Hazardous Waste from Non-Specific Sources
- Corrosive Wastes
- Reactive Wastes
- Industrial Process Sludge
- Off-Spec Products
- · Acutely Hazardous Wastes
- Discarded Commercial Chemical Products
- Contaminated Rainwater
- Ignitable Wastes
- Toxicity Characteristic Wastes
- Toxic Wastes
- Treatment & Processing Residual Wastes

Prohibited Waste

The facility is prohibited from accepting any of the following waste materials:

- Radioactive or nuclear waste material (i.e., waste material which emits ionizing radiation spontaneously);
- Explosive material as defined by the Department of Transportation (DOT) in Title 49 Code of Federal Regulations (CFR) Part 173;
- Solid wastes contaminated with polychlorinated biphenyls (PCBs) as defined and regulated by the Toxic Substances Control Act in 40 CFR Part 761.

Facilty Address	Phone Number	Company Web Page	Facility Web Page
2525 Battleground Road Deer Park, Texas	281-930-2525	www.thegnigroup.com	

Return to Facility List

Texas Commission on Environmental Quality.
Investigation Report. Texas Molecular Limited
Partnership. CN601546807. RN100209568.
Investigation #564467. July 25, 2007. 6 pages.

COPY

Texas Commission on Environmental Quality **Investigation Report**

Texas Molecular Limited Partnership CN601546807

TM DEER PARK SERVICES

RN100209568

Investigation #564467

Incident#

Investigator:

REBECCA ALVARADO

Site Classification

INJECTION WELL

LARGE QUANTITY GENERATOR **CONTAINER STORAGE AREA** MISCELLANEOUS STORAGE

CONTAINERS

TANK

TANK (SURFACE)

Conducted:

06/15/2007 - 06/21/2007

SIC Code: 4953

NAIC Code: 562211

Program(s):

INDUSTRIAL AND HAZARDOUS WASTE STORAGE INDUSTRIAL AND HAZARDOUS WASTE GENERATION INDUSTRIAL AND HAZARDOUS WASTE PROCESSING INDUSTRIAL AND HAZARDOUS WASTE DISPOSAL

Investigation Type: Compliance Investigation

Location: 2525 Battleground Rd, Deer Park,

TX

Additional ID(s):

TXD000719518

50058

Address:;,

Activity Type:

REGION 12 - HOUSTON

IHWTSD - CEI of treatment/storage/disposal facility

Principal(s):

Role

Name

RESPONDENT

TEXAS MOLECULAR LIMITED PARTNERSHIP

Contact(s):

Role

Title

Name

Phone

Notified

ENVIRONMENTAL SPECIALIST

MR SHAYNE WILSON

Work

(281) 930-2567

Participated in Investigation

ENVIRONMENTAL

MR SHAYNE

Fax

(281) 930-2591

SPECIALIST

WILSON

MR SHAYNE

Regulated Entity Contact

ENVIRONMENTAL SPECIALIST ENVIRONMANTAL VICE

WILSON MR JIM ROBBINS

Participated in Investigation

PRESIDENT

ENVIRONMANTAL VICE MR JIM ROBBINS

Fax Work (281) 930-2591 (281) 930-2587

Other Staff Member(s):

Regulated Entity Mail Contact

Role

Name

PRESIDENT

Supervisor **QA** Reviewer **CARLOS ROMO** GITA ARASTEH

Associated Check List

Checklist Name

Unit Name

001

IHW CEI GENERAL FACILITY

IHW CONTAINER STORAGE AREA

IHW LAND DISPOSAL RESTRICTIONS FOR GENERA

IHW NEW TANKS

IHW PERMIT COMPLIANCE

IHW PERMITTED CONTAINER STORAGE AREA

IHW PERMITTED FACILITY GENERAL STANDARDS

IHW PRE-INVESTIGATION

general
csa
ldr
tanks
permit compliance
permitted csa
permit standards

Investigation Comments:

INTRODUCTION

On June 15, 20, and 21, 2007, Ms. Rebecca Alvarado of the Texas Commission on Environmental Quality (TCEQ) - Houston Regional Office conducted an Industrial and Hazardous Waste Compliance Evaluation Investigation (CEI) of TM Deer Park Services (TM) located at 2525 Battleground Rd, Deer Park (Harris County), Texas 77536.

Notification of the CEI was made to Mr. Shayne Wilson, Environmental Specialist, by telephone on June 8, 2007. A list of the files for review during the investigation was faxed to Mr. Wilson later that day. On June 15, 2007, the investigator met with Mr. Wilson and Mr. Jim Robbins, Environmental Vice President. During the opening conference, the purpose and scope of the CEI was explained. A Core Data Form (Attachment 1) was given to the facility's representative for review and to make any necessary corrections. At the conclusion of the site investigation each day, an exit interview was conducted with the facility representatives. The noted violations were discussed including the updates to the Notice of Registration. These are addressed in the Area of Concern section of this report. An Exit Interview Form was given to Mr. Wilson on June 21, 2007 at the conclusion of the site investigation (Attachment 2).

The publication "The TCEQ Has Inspected Your Business, What Does This Mean to You?" (RG-344) was provided to the facility's representative.

GENERAL FACILITY AND WASTE PROCESS INFORMATION

TM is located on 10 acres south of the Houston Ship Channel within Segment 1007 of the San Jacinto River Basin. Land use in the area is industrial and commercial. A location map can be found in Attachment 3. TM receives acidic, caustic, and organic wastes. The organic wastes are blended for treatment, disposal or energy recovery. Acidic and caustic wastes are sent to the on-site underground injection control (UIC) well for disposal. The site consists of tank farms, truck unloading areas, laboratory, and an office building. A facility map can be found in Attachment 3. TM operates 24 hours a day, seven days a week.

The site began operations as Disposal Systems Inc. (DSI) in 1982, with a Class 1 injection well for industrial solid waste disposal. In 1987, GNI Group was the owner of the facility but continued to operate the site under the Disposal Systems Inc name. GNI declared Chapter 11 Bankruptcy in 2000. The site continued to operate through the bankruptcy proceedings, and in September 2001 Texas Molecular owned the site and formed TM Deer Park Services LLC. A name change to TM Deer Park Services LP occurred in about 2004.

The facility submitted its application for a RCRA permit in 1983 with the first permit issued on August 27, 1992, and was re-issued on May 23, 2003. The permit authorizes hazardous and non-hazardous industrial solid waste storage and processing from on-site and off-site sources. The permitted units covered by the facility's permit include 129 tanks and ten container storage areas. The facility is authorized to receive all EPA hazardous waste codes.

The facility has had two Class 2 permit modification approved since the current permit was issued. The first Class 2 permit modification was approved on August 3, 2005 for the application of a secondary liner to two permitted tanks, the division of one of the secondary containment areas into two secondary containment areas, and the increase in wall height of one secondary containment areas. The other Class 2 permit modification was approved on November 21, 2005 for the addition of four new storage treatment areas, nine new hazardous waste tank systems, relocation of previously proposed storage

TM DEER PARK SERVICES - DEER PARK

June 15 07 to June 21 07 Inv. # - 56--67

Page 3 of 6

treatment areas, addition of form codes to Table IV.B of the permit, update emergency equipment, update emergency coordinator, and to correct minor typographical errors.

WDW-169 and WDW-249 are the site's two permitted UIC Class 1 wells. The initial permit for WDW-169 was issued on March 7, 1983. The initial permit for WDW-249 was issued on July 14, 1987 and was placed in service in 1993. The current permits were issued on October 9, 1998. The facility applied and received a no-migration petition for disposal of hazardous waste into the injection wells. The facility is in the process of renewing the petition. More information regarding the site's UIC wells can be found in the UIC investigation report numbers 564913 and 564922.

Other TCEQ permits and registrations held by TM include: air account HG3043A; UIC injection permits WDW-169 and WDW-249; stormwater permit TXR05L136; and a public water system/supply registration 1012699.

On the NOR (Attachment 4), last amendment date of February 28, 2007 and last computer updated on March 8, 2007 the facility is registered as a Receiver, and a Large Quantity Generator of hazardous waste.

WASTE STREAMS

On the NOR, there are 45 waste streams. Of those waste streams, 22 are classified as hazardous, 13 are classified as Class 1, and 10 are classified as Class 2.

The largest hazardous waste stream (WS) generated in 2006 was WS 0029103H (Toxicity Characteristic Waste) at 21,107,172 pounds. The EPA hazardous waste numbers for this WS are listed as D001, D007, and D018. It was noted that the remaining EPA toxicity characteristic hazardous waste codes need to be added on the NOR. This waste was disposed in the on-site injection wells WDW-169 and WDW-249.

The largest Class 1 WS generated in 2006 was WS 00181191 (Rainwater Contaminated) at 32,411,792 pounds. This waste was also disposed in the on-site injection wells WDW-169 and WDW-249.

The recent off-site disposal facilities utilized by the facility in the recent past include: TXI Operations LP (SWR No. 33918) in Midlothian, Texas; Veolia Environmental Services in Port Arthur, Texas; Rineco (EPA ID ARD981057870) in Benton, Arkansas; Chemical Waste Management (EPA ID LAD000777201) in Sulphur, Louisiana; Coastal Plains (TCEQ Permit No. H1721) in Alvin, Texas; and Baytown Landfill (TCEQ Permit No. 1535-A) in Baytown, Texas.

WASTE MANAGEMENT UNITS

There are 94 active waste management units (WMUs) listed on the NOR. The active permitted units on the NOR consists of two injection wells, 77 tanks, six container storage areas (CSAs), two drip pads, and one plant roads. The active non-permitted units on the NOR include five CSAs, and one miscellaneous storage container (MSC).

Tanks

A tanks table can be found in Attachment 5. The table includes information regarding tank name, NOR unit number, permit number, waste managed, capacity, and date put in service. All tanks on-site are permitted units.

During the investigation, it was noted that the permit number for the tanks as listed in the facility's current permit is different from the permit number for the tank listed on the facility's current NOR. These two documents should be consistent. This item was discussed with the facility's permit writer, Ms. Vaishali Tendolkar. Ms. Tendolkar stated that the permit is the correct document. Ms. Tendolkar has initiated the correction to the NOR for the permit unit numbers.

It was also noted that NOR 114 to 137, 139 to 151, and 153 listed on the NOR as active tank WMUs are not in waste service. The tanks have been permitted for waste service, but have not been placed in

TM DEER PARK SERVICES - DEER P 'RK

June 15 07 to June 21 07 inv. # - 564.../

Page 4 of 6

waste service. The units are being operated as product tanks by the sister company TM Chemicals on the property. Additionally, during the site walk-through it was noted that tanks NOR 034 (T-8) and NOR 035 (T-12) are not present on-site. The units will eventually be replaced by replacement tanks of same capacity per the permit. These units should be made inactive on the facility's NOR. This is discussed further in the Area of Concern section of this report.

Container Storage Areas (CSA)

A CSA table can be found in Attachment 6. The table includes information regarding CSA name, NOR unit number, permit number, waste managed, and the containers present during investigation. All containers were labeled properly and were kept closed. No issues were noted regarding the site's CSAs.

Other Waste Management Units

NOR 009 is listed as Plant Roads on the NOR with a description of Filter PFF-1. NOR 104 and 106 are listed as Drip Pads on the facility's NOR with a description of Filters Pff-2 and Filters F-1B, respectfully. These units are not plant roads and drip pads but are filters that have been determined part of a tank system. These units were previously permitted under the facility's initial permit. In the permit renewal, the units were determined to be part of the tank systems and were included with the permitted tanks. The filters can be used from any of the following tanks: NOR 007, 009012, 016, 025 to 027, 030, 031, 036, 038 to 040053, 054, 058, 059, and 064. NOR 009, 104 and 106 should be made inactive on the facility's NOR. This is discussed further in the Area of Concern section of this report.

NOR 006 (WDW-169) and NOR 0023 (WDW-249) are the site's permitted UIC wells. The wells inject hazardous and non-hazardous liquid wastes into the Frio formation in the injection interval of 5,030 to 7,350 feet below ground level.

NOR 024 is a MSC on the NOR and is used for the facility's plant trash. The dumpsters are located at various points around the plant.

The facility maintains nine satellite accumulation areas (SAAs) in the plant. The areas were observed during the site investigation. Containers were kept closed and were labeled properly. No issues were noted.

ADDITIONAL RECORDS REVIEWED

During the investigation the additional files were reviewed: hazardous waste permit, 2006 Annual Waste Summary, Monthly Waste Receipt Reports, Waste Determinations, manifests, land disposal restriction documentation, container storage area inspection logs, tank inspection logs, tank assessments, Waste Analysis Plan, Contingency Plan, Preparedness and Prevention Plan, Source Reduction and Waste Minimization Plan, annual waste minimization certification, security, emergency equipment inspection logs, financial assurance, and training documentation. No issues were noted in regards to the above items.

BACKGROUND

The Houston Regional Office files were reviewed and a database search was conducted pursuant to this CEI. No outstanding alleged violations were found for TM in regards to industrial and hazardous waste generation.

The last CEI was conducted on May 22, 2006 by Mr. Bruce Arnett of the TCEQ Houston Regional Office. Two additional issues were noted during the investigation and have since been resolved.

SUMMARY OF AREA OF CONCERN

During the investigation conducted on June 15, 20, and 21, 2007, the following area of concern was documented and resolved within 14 calendar days:

TM DEER PARK SERVICES - DEER PARK

June 15 07 to June 21 07 Inv. # - 56- ...7

Page 5 of 6

Permit Provision II.C.1.h / 30 Texas Administrative Code (TAC) 335.6(c) - Notification Requirements (Category C3).

During the investigation it was noted that the facility's Notice of Registration (NOR) was not kept up to date. The following changes should be made through the TCEQ program STEERS:

- a. The remaining EPA toxicity characteristic hazardous waste codes should be added to waste stream 0029103H.
- b. Indicate the following tanks as inactive: NOR 034, 035, 114 to 137, 139 to 151, and 153.

On June 26, July 5 and 12, 2007 the Houston Region Office received documentation that the above items have been changed through the TCEQ program STEERS or were requested be changed to the TCEQ Registration and Reporting Section (Attachment 7). Therefore, this area of concern is considered resolved.

NOV Date

Method

07/25/2007

AREA OF CONCERN

AREA OF CONCERN

Track No: 280512

Resolution Date: July 05 07

30 TAC Chapter 335.6(c) **PERMIT Provision II.C.1.h**

Incorporated Regulatory Requirement of 30 TAC Chapter 335, Subchapter A

Alleged Violation:

Investigation: 564467

Comment Date: 07/20/2007

During the investigation it was noted that the facility's Notice of Registration (NOR) was not kept up to date.

Recommended Corrective Action: The following changes should be made through the TCEQ program STEERS:

a. The remaining EPA toxicity characteristic hazardous waste codes should be added to waste stream 0029103H.

b. Indicate the following tanks as inactive: NOR 034, 035, 114 to 137, 139 to 151, and

Resolution: On June 26, July 5 and 12, 2007 the Houston Region Office received documentation that the above items have been changed through the TCEQ program STEERS or were requested be changed to the TCEQ Registration and Reporting Section. Therefore, this area of concern is considered resolved.

Signed

TM D	EER PARK SERVICES - DEER PARK	
June	15 07 to June 21 07 Inv. # - 564 .7	
Page	6 of 6	
	Attachments: (in order of final report submittal)	
	Enforcement Action Request (EAR)	3 Maps, Plans, Sketches
	X Letter to Facility (specify type): (IND. (DMP (NOC)	Photographs
	Investigation Report	T Correspondence from the facility
	Sample Analysis Results	✓ Other (specify):
	Manifests	See List of Attrichments
	<u>4</u> nor	

Texas Commission on Environmental Quality. Permit to
Conduct Class I Underground Injection under
Provisions of Texas Water Code, Chapters 26 and 27, and
Texas Health and Safety Code Ann. Chapter 361. Permit
No. WDW169. 7 pages.





Texas Commission on Environmental Quality Austin, Texas

Permit To Conduct
Class I Underground Injection
under Provisions of Texas Water Code,
Chapters 26 & 27, and Texas Health and
Safety Code Ann. Chapter 361

I. Permittee

TM Deer Park Services Limited Partnership P.O. Box 1914 Deer Park, TX 77536

II. Type of Permit

Initial Renewal X Amended X			٠.			
Commercial X Noncommercial X						
Hazardous X Nonhazardous X						
Onsite X Offsite X		•				
Authorizing Disposal of Waste from Captured Facility						
Authorizing Disposal of Waste from Off-site Facilities	Cwn	ed by	Owner	r/Operat	OI	_

III. Nature of Business

Commercial hazardous and non-hazardous waste storage, processing, and disposal facility.

CONTINUED on Pages 2 through 6

The permittee is authorized to conduct injection in accordance with limitations, requirements, and other conditions set forth herein. This permit is granted subject to the rules and orders of the Commission, and the laws of the State of Texas. The permit will be in effect for ten years from the date of approval or until amended or revoked by the Commission. If this permit is appealed and the permittee does not commence any action authorized by this permit during judicial review, the term will not begin until judicial review is concluded.

ISSUED: MAY 2 8 2009

Fan The Commission

TM Deer Park Services Limited Partnership WDW169

Page 2

IV. General Description and Location of Injection Activity

The disposal well is used to dispose of hazardous and nonhazardous wastes generated by the permittee's facility and from other sources. The well is located 11,844 feet north of the south line and 584 feet west of the east line of the G. Ross Survey, A-646, Latitude 29°44'10.09" North, Longitude 95°05'30.21" West, Harris County, Texas. The injection zone is within the Prio/Anahuac Formation at the depths of 5,030 to 7,350 feet below ground level. The authorized injection interval is within the Prio Formation at the depths of 5,530 to 7,350 feet below ground level.

V. Character of the Waste Streams

- A. Industrial hazardous and nonhazardous waste authorized to be injected by this permit shall consist solely of the following waste streams:
 - 1. a. Aqueous Organic Waste
 - b. Reactive Waste
 - c. General Aqueous Waste
 - d. Acidic Aqueous Waste
 - e. Liquid Miscellaneous Organics
 - f. Contaminated Waters
 - g. Containerized Liquid Waste
 - 2. Other associated wastes such as ground water and rainfall contaminated by the above authorized wastes, spills of the above authorized wastes, and wash waters and solutions used in cleaning and servicing the waste disposal well system equipment which are compatible with the permitted waste streams, injection zone and well materials.
 - Wastes generated during well construction or closure of the well and associated facilities that are compatible with permitted wastes, injection zone and the well.
- B. The injection of wastes is limited to those wastes authorized in Provision V.A. above, into the Frio Formation within the injection zone between 5,030 to 7,350 feet below ground level.
- C. The acidity of injected waste streams shall not be more than 15% acid by weight.
- D. Except when authorized by the Executive Director, the specific gravity of injected fluids shall be greater than or equal to 0.90 and less than or equal to 1.25 as measured at 68°F at surface.
- VI. Waste Streams Prohibited From Injection

Unless authorized by Provision V.A., the following waste streams are prohibited:

- A. Wastes prohibited from injection in 40 CFR Part 148, Subpart B, are specifically prohibited from injection by this permit, unless an exemption from prohibition has been granted pursuant to 40 CFR Part 148, Subpart C, or the wastes meet or exceed the applicable treatment standards in 40 CFR Part 268, Subpart D;
- B. Any by-product material as defined by Texas Health & Safety Code §401.003(3);

- C. Any low-level radioactive waste as defined by Texas Health & Safety Code §401.004;
- D. Any naturally occurring radioactive material (NORM) waste as defined by Texas Health & Safety Code §401.003(26); and
- B. Any oil and gas NORM waste as defined by Texas Health & Safety Code §401.003(27).

VII. Operating Parameters

The well shall be operated in compliance with the requirements of 30 TAC Chapters 305, 331, and 335; the plans and specifications of the permit application; and the following conditions:

- A. Surface injection pressure shall not cause pressure in the injection zone to:
 - 1. initiate any new fractures or propagate existing fractures in the injection zone;
 - 2. initiate new fractures or propagate existing fractures in the confining zone; or
 - cause movement of fluid out of the injection zone that may contaminate underground sources of drinking water (USDWs), and fresh water.
- B. The operating surface injection pressure shall not exceed values as tabulated below:

Injection Depth (ft)	Specific Gravity of Waste Stream (SG)	Maximum Operating Surface Injection Pressure (psi)
5,530 to 6,784	SG≤1.2	1,000
	SG > 1.2	900
6,784 to 7,350	SG ≤1.2	1,000
	SG > 1.2	1,000

- C. The maximum injection rate shall not exceed:
 - accumulative total of 450 gallons per minute for WDW169, WDW249, and WDW422 while injecting at a depth of 6,784 feet KB or below;
 - accumulative total of 260 gallons per minute for WDW169, WDW249, and WDW422 while injecting above 6,784 feet KB.
- D. The volume of waste water injected shall not exceed:
 - accumulative total of 236,520,000 gallons per year for WDW169, WDW249, and WDW422 while injecting at a depth of 6,784 feet KB or below;

- accumulative total of 136,300,000 gallons per year for WDW169, WDW249, and WDW422 while injecting above 6,784 feet KB.
- E. If WDW169, WDW 249, or WDW422 is completed to inject above 6,784 feet KB, injection in that well shall be limited to no more than one year.
- F. A positive pressure of at least 100 psig over tubing injection pressures shall be maintained in the tubing-easing annulus for the purpose of leak detection. Temporary deviations from this requirement which are a part of normal well operations are authorized but may not exceed 15 minutes in duration. For 15 minutes after the pressure differential drops below 100 psig, the permittee shall conduct troubleshoeting and proceed to restore a minimum 100 psig pressure differential. If a minimum 100 psig pressure differential cannot be achieved within 15 minutes, the permittee shall notify the Texas Commission on Environmental Quality (TCEQ) and commence shut-in procedures on the well. The permittee may continue to operate the well under flow conditions that maintain a minimum 100 psig pressure differential.
- G. The permittee shall notify the Executive Director at least 24 hours prior to commencing any workover which involves taking the injection well out of service. Approval by the Executive Director shall be obtained before the permittee may begin work. Notification shall be in writing and shall include plans for the proposed work. The Executive Director may grant an exception to the prior written notification and approval when immediate action is required to prevent pollution according to 30 TAC §331.5. Completion of the well outside the approved injection interval, by perforation of casing, setting of screen, or establishment of open hole section, requires that the permitted injection interval be changed according to 30 TAC §331.62(a)(3)(C) to include the depths of all well completion. Pressure control equipment shall be installed and maintained during workovers which involve the removal of tubing.

VIII. Monitoring and Testing Requirements

- A. Monitoring and testing shall be in compliance with the requirements of 30 TAC §305.125, §331.64, the plans and specifications of the permit application, and the following conditions.
- B. The integrity of the long string casing, injection tubing, and annular seal shall be tested by means of an approved pressure test with a liquid or gas annually and whenever there has been a well workover. The integrity of the cement within the injection zone shall be tested by means of an approved radioactive tracer survey annually. A radioactive tracer survey may be required after workovers that have the potential to damage the cement within the injection zone.
- C. The pressure buildup in the injection zone shall be monitored annually, including at a minimum, a shutdown of the well for a sufficient time to conduct a valid observation of the pressure fall-off curve.
- D. A temperature log, noise log, oxygen activation log or other approved log is required at least once every five years to test for fluid movement along the entire borehole.
- E. A casing inspection, casing evaluation, or other approved log shall be run whenever the owner or operator conducts a workover in which the injection string is pulled, unless the Executive Director waives this requirement due to well construction or other factors which

TM Deer Park Services Limited Partnership WDW169

Page 5

limit the test's reliability, or based upon the satisfactory results of a casing inspection log rm within the previous five years. The Executive Director may require that a casing inspection log be rm every five years if there is sufficient reason to believe the integrity of the long string casing of the well may be adversely affected by naturally occurring or man-made events.

- F. Injection fluids shall be tested in accordance with 30 TAC §331.64(b) and the approved waste analysis plan.
- G. The pH and specific gravity of the injected waste shall be monitored at least once every three hours or whenever the source material changes.
- H. Corrosion monitoring of well materials shall be conducted quarterly and in accordance with 30 TAC §331.64(g). Test materials shall be the same as those used in the wellhead, injection tubing, packer, and long string casing, and shall be continuously exposed to the waste fluids except when the well is taken out of service.
- I. The permittee shall ensure that all waste analyses used for waste identification or verification and other analyses for environmental monitoring have been performed in accordance with methods specified in the current editions of EPA SW-846, ASTM or other methods accepted by the TCEQ. The permittee shall have a Quality Assurance/Quality Control program that is consistent with EPA SW-846 and the TCEQ Quality Assurance Project Plan.

IX. Record Keeping Requirements

The permittee shall keep complete and accurate records as required by 30 TAC Chapters 305, 331, and 335. In addition, the permittee shall also keep complete and accurate records of:

- 1. Injection fluid pH;
- 2. Injection fluid specific gravity; and
- Quarterly reports of corrosion monitoring.

X. Financial Assurance for Well Closure .

In accordance with 30 TAC Chapter 37, 30 TAC Section 305.154(a)(9), and Sections 331.142-144, the permittee shall secure and maintain financial assurance, in a form approved by the Executive Director, in the amount of \$179,082 (in 2007 dollars). Adjustments to the cost estimates for plugging and abandonment in current dollars, and to financial assurance based thereon, shall be made in accordance with 30 TAC Chapter 37.

XI. Additional Requirements

- A. Acceptance of this permit by the permittee constitutes an acknowledgment and agreement that the permittee will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- B. This permit is subject to further orders and rules of the Commission. In accordance with the procedures for amendments and orders, the Commission may incorporate into permits already granted, any condition, restriction, limitation, or provision reasonably necessary for the

TM Deer Park Services Limited Partnership WDW169

Page 6

administration and enforcement of Texas Water Code, Chapters 26 and 27, and Texas Health and Safety Code, Chapter 361.

- C. This permit does not convey any property rights of any sort, nor any exclusive privilege, and does not become a vested right in the permittee.
- D. The issuance of this permit does not authorize any injury to persons or property or an invasion of other property rights, or any infringement of state or local law or regulations.
- B. The following rules are incorporated as terms and conditions of this permit by reference:
 - 1. 30 TAC Chapter 305, Consolidated Permits;
 - 2. 30 TAC Chapter 331, Underground Injection Control;
 - 3. 30 TAC Chapter 335, Industrial Solid Waste and Municipal Hazardous Waste; and
- F. The express incorporation of the above rules as terms and conditions of this permit does not relieve the permittee of an obligation to comply with all other laws or regulations which are applicable to the activities authorized by this permit.
- G. Incorporated Application Materials. This permit is based on, and the permittee shall follow, the plans and specifications contained in the Class I Underground Injection Control Application dated June 17, 2008 as revised on November 18, 2008, which are hereby approved subject to the terms of this permit and any other orders of the TCEQ. These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.
- H. All pre-injection units servicing this well are authorized under Resource Conservation and Recovery Act (RCRA) permit 50058 [30 TAC Chapter 335] or are exempt from the requirement for a permit under 30 TAC Section 335.69.
- I. The Texas solid waste registration (SWR) number for this site is 32299.

Texas Commission on Environmental Quality. Permit to
Conduct Class I Underground Injection under
Provisions of Texas Water Code, Chapters 26 and 27, and
Texas Health and Safety Code Ann. Chapter 361. Permit
No. WDW422. 7 pages.



Permit No. WDW422

Texas Commission on Environmental Quality Austin, Texas

Permit To Conduct Class I Underground injection under Provisions of Texas Water Code, Chapters 26 & 27, and Texas Health and Safety Code Ann. Chapter 361

L Permittee

TM Deer Park Services Limited Partnership P.O. Box 1914 Deer Park, TX 77536

II. Type of Permit

Initial X Renewal Amended		
Commercial X Noncommercial X	• •	
Hazardous X Nonhazardous X		
Onsite X Offsite X		
Authorizing Disposal of Waste from Captured Facility	-	•
Authorizing Disposal of Waste from Off-site Facilities Owned by Owne	r/Operato	or

III. Nature of Business

Commercial hazardous and non-hazardous waste storage, processing, and disposal facility.

CONTINUED on Pages 2 through 6

The permittee is authorized to conduct injection in accordance with limitations, requirements, and other conditions set forth herein. This permit is granted subject to the rules and orders of the Commission, and the laws of the State of Texas. The permit will be in effect for ten years from the date of approval or until amended or revoked by the Commission. If this permit is appealed and the permittee does not commence any action authorized by this permit during judicial review, the term will not begin until judicial review is concluded.

ISSUED: MAY 2 8 2009

For The Commission

- B. The injection of wastes is limited to those wastes authorized in Provision VI.A. above, into the Frio Formation within the injection zone between 5,030 to 7,350 feet below ground level.
- C. The acidity of injected waste streams shall not be more than 15% acid by weight.
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- B. Any by-product material as defined by Texas Health & Safety Code \$401.003(3);
- C. Any low-level radioactive waste as defined by Texas Health & Safety Code §401.004;
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 - 1. initiate any new fractures or propagate existing fractures in the injection zone;
 - 2. initiate new fractures or propagate existing fractures in the confining zone; or
 - cause movement of fluid out of the injection zone that may contaminate USDWs and fresh water.

exception to the prior written notification and approval when immediate action is required to prevent pollution according to 30 TAC §331.5. Completion of the well outside the approved injection interval, by perforation of casing, setting of screen, or establishment of open hole section, requires that the permitted injection interval be changed according to 30 TAC §331.62(a)(3)(C) to include the depths of all well completion. Pressure control equipment shall be installed and maintained during workovers which involve the removal of tubing.

IX. Monitoring and Testing Requirements

- A. Monitoring and testing shall be in compliance with the requirements of 30 TAC §305.125, §331.64, the plans and specifications of the permit application, and the following conditions.
- B. The integrity of the long string casing, injection tubing, and annular seal shall be tested by means of an approved pressure test with a liquid or gas annually and whenever there has been a well workover. The integrity of the cement within the injection zone shall be tested by means of an approved radioactive tracer survey annually. A radioactive tracer survey may be required after workovers that have the potential to damage the cement within the injection zone.
- C. The pressure buildup in the injection zone shall be monitored annually, including at a minimum, a shutdown of the well for a sufficient time to conduct a valid observation of the pressure fall-off curve.
- D. A temperature log, noise log, oxygen activation log or other approved log is required at least once every five years to test for fluid movement along the entire borehole.
- E. A casing inspection, casing evaluation, or other approved log shall be run whenever the owner or operator conducts a workover in which the injection string is pulled, unless the Executive Director waives this requirement due to well construction or other factors which limit the test's reliability, or based upon the satisfactory results of a casing inspection log run within the previous five years. The Executive Director may require that a casing inspection log be run every five years if there is sufficient reason to believe the integrity of the long string casing of the well may be adversely affected by naturally occurring or man-made events.
- F. Injection fluids shall be tested in accordance with 30 TAC §331.64(b) and the approved waste analysis plan.
- G. The pH and specific gravity of the injected waste shall be monitored at least once every three hours or whenever the source material changes.
- H. Corrosion monitoring of well materials shall be conducted quarterly and in accordance with 30 TAC §331.64(g). Test materials shall be the same as those used in the wellhead, injection tubing, packer, and long string casing, and shall be continuously exposed to the waste fluids except when the well is taken out of service.
- I. The permittee shall ensure that all waste analyses used for waste identification or verification and other analyses for environmental monitoring have been performed in accordance with methods specified in the current editions of EPA SW-846, ASTM or other methods accepted by the TCEQ. The permittee shall have a Quality Assurance/Quality Control program that is consistent with EPA SW-846 and the TCEQ Quality Assurance Project Plan.

Texas Deer Park Services Limited Partnership WDW422

Page 7

Application dated June 17, 2008 as revised on November 18, 2008, which are hereby approved subject to the terms of this permit and any other orders of the TCEQ. These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the Commission.

- H. All pre-injection units servicing this well are authorized under Resource Conservation and Recovery Act (RCRA) permit 50058 [30 TAC Chapter 335] or are exempt from the requirement for a permit under 30 TAC Section 335.69.
- 1. The Texas solid waste registration (SWR) number for this site is 32299.

Texas Commission on Environmental Quality. Central
Registry Internal Reporting Query. Texas Molecular. RN
#102170024. Accessed April 4, 2011. 1 page.

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Main Query Page | Program Area Search

Regulated En	tity Detail					
Regulated Entity Name:	TEXAS MOLECULAR			RN102170024		
Status:	Active	Status Comment:		Stand Alone:	N	
Physical Address:	2525 BATTLEGROUND		County:	HARRIS		
Physical Location:	2525 BATTLEGROUND					
Nearest City:	DEER PARK	State:		Zip Code:	77536	
Latitude:		Longitude:				

1-3 of 3 Records

Affiliated Customers						
CN Number	Customer A	Role	Begin Date	End Date	RE Comp Hist	
CN501177165	DISPOSAL SYSTEMS INC	OWNER	05/12/1993	12/31/3000	ABD	
CN601421629	TM DEER PARK SERVICES LIMITED PARTNERSHIP	RESPONSIBLE PARTY	08/22/2008	12/31/3000	. <u>ABD</u>	
CN600792089	TM TECHNICAL SERVICES LLC	OWNER OPERATOR	01/1/1800	12/31/3000	ABD	

1-10 of 10 Records

Program Interests								
Program	RE Type	ID Type	Addn ID	Addn ID Status	Alt RE Name	Role	Customer Name (CN)	Begin Date - End Date
AIR NEW SOURCE PERMITS	SITE	REGISTRATION	32576	CANCELLED	TEXAS MOLECULAR	OWNER	DISPOSAL SYSTEMS INC (CN601177165)	10/25/2006 - 08/22/2008
AIR NEW SOURCE PERMITS	SITE	REGISTRATION	32139	CANCELLED	TEXAS MOLECULAR	OWNER	DISPOSAL SYSTEMS INC (CN601177165)	10/25/2006 - 08/22/2008
AIR NEW SOURCE PERMITS	SITE	ACCOUNT NUMBER	HG5056A	INACTIVE				
INDUSTRIAL AND HAZARDOUS WASTE	SITE	SOLID WASTE REGISTRATION # (SWR)	86603	INACTIVE		OWNER OPERATOR	TM TECHNICAL SERVICES LLC (CN600792089)	01/01/1800 - 08/22/2008
INDUSTRIAL AND HAZARDOUS WASTE	SITE	EPA ID	TXR000037507	INACTIVE				
PUBLIC WATER SYSTEM/SUPPLY	SITE	REGISTRATION	1012699	ACTIVE		RESPONSIBLE PARTY	TEXAS MOLECULAR LIMITED PARTNERSHIP (CN601546807)	01/01/1800 - 04/25/2007
PUBLIC WATER SYSTEM/SUPPLY	SITE	REGISTRATION	1012699	ACTIVE	<u>.</u>	RESPONSIBLE PARTY	THE GNI GROUP INC (CN600124150)	01/01/1800 - 04/25/2007
PUBLIC WATER SYSTEM/SUPPLY	SITE	REGISTRATION	1012699	ACTIVE		OWNER OPERATOR	TM TECHNICAL SERVICES LLC (CN600792089)	01/01/1800 - 08/22/2008
PUBLIC WATER SYSTEM/SUPPLY	SITE	REGISTRATION	1012699	ACTIVE		RESPONSIBLE PARTY	TM DEER PARK SERVICES LIMITED PARTNERSHIP (CN801421829)	08/22/2008 - 12/31/3000
WATER LICENSING	ORGANIZATION	LICENSE	1012699	INACTIVE				

Central Registry Glossary Central Registry Help Map of Regional Planning Areas Migrated Systems

For questions or comments regarding this T-Net page contact: <u>Central Registry</u>
This site was last modified: August 23, 2010

Texas Commission on Environmental Quality. Water

System Data Sheet Report. Texas Molecular. PWS

#1012699. Accessed March 18, 2010. 3 pages.

03/18/2010

Texas Commission on Environmental Quality

WSDSR

PWS ID PWS Nam 1012699 TEXAS N Organization/Custome DISPOSAL SYSTEM TM TECHNICAL SE TM DEER PARK SE * Regulatory mail will be Responsible Official ** CASEY BOROWSK Mailing Address: Street Address PO BOX 1914	NOLECULAR r * MS INC RVICES LLC ERVICES LIMITED e addressed to this of			n			Central Registry RN RN102170024 Central Registry CN CN601177165 CN600792089
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Responsible Official ** CASEY BOROWSK Mailing Address: Street Address		organizati	on / perso		• .	•	CN601421829
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(281) 930- (28 2587 259	1) 930-2502(281) ! 1	930-	CELLUI	_AR		. ,	
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PWS Contact - If differ	ent than above ***			Title		MANAOED	
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Street Address				C/O or /	Addre	ss Line 2	
		<u> </u>					· · · · · · · · · · · · · · · · · · ·
Cit.		State	 	1-7:			
City		State		Zip	· .		
		<u> </u>					
Business Phone	Other Phone	Other F	hone Type	<u> </u>	Emai		
(281) 930-2567	Calci i none	Toulett.	none rype				· · · · · · · · · · · · · · · · · · ·
(201) 330-2307				**************************************	1		
*** Copies of most regu	llatory mail will be a	ddressed	to this nor	eon:		<u>-</u>	
Copies of most regu	diatory man win be a	uuiesseu	to this per	3011			
No Emergency Co	ntact assigned to	this PW	/S				
			· ·				
Owner Type	Owner Type Optio	ns: AFFE	CTED CO	UNTIES	, co	UNTY, DISTRIC	T/AUTHORITY,
PRIVATE	EXEMPT, FEDER PRIVATE, SUBM	RAL GOV ETER \ A	ERNMENT LLOCATION	Γ, INVES	STOR ATE G	R, MUNICIPALIT GOVERNMENT, I	Y, NATIVE AMERICAN, NOT RETAIL PUBLIC
FRIVAIC	UTILITIES, WATE						

1 3 St.	pe Options: COMMUNITY, COMMUNITY (NON-GOVERNMENT O	WNED).
	T/NON-COMMUNITY, NON-PUBLIC, NON-TRANSIENT/NON- TY, FOR SB361 TRACKING	

Customer	Customer	Population	# of	# of	# I/C
Class	Category	Served	Connect	Meters	w/other PWS
NON-TRANSIENT	INDUSTRIAL/AGRICULTURAL	50	2	0	0

Product	Daily	Storage	Storage	Il Pilmh L'an	IAIN Prod Can	Pressure Tank Cap.(MG)
0.115	0.000	0.030	0.000	0.288	0.000	0.00052

Activity Status	Deactivation Date	Reason	 	
ACTIVE			 	923 43

Operator Grade	Number
WATER GRADE D	1

Last Survey Date	Surveyor	Survey Type	Code	Region	County	Def.Score
03/13/2007	STACY TANNER	SURVEY		12	HARRIS	0
11/20/2003	LAN VU	SURVEY		12	HARRIS	2
08/14/2001	DESHAUNE BLAKE	SURVEY		12	HARRIS	0

	(Entry Point)							
Point	EP Name/Source Summation (Activity Status)	Plant Name (Activity Status)	IIUlant	III Chemical	Chem Sample Point	Mon Type	Dist Sample Point	
001	1	2525 BATTLEGROUND RD()	6841	,	No		No	

ı	T (11mm	A)	
ı	Train: (Unnamed	3 }	•
L			

(Treatments)								
Disinfection Zone	Treatment Sequence	Objective	Process	Treatment				
	1	D	403	GASEOUS CHLORINATION(PRE)				

		(Ad	ive Sources)					
Source Number	Source Name (Activity Status)		Source Name (Activity Status) Operational Source Status Type		B	Depth	Tested GPM	Rated GPM
G1012699A 1 - 2525 BATTLEGROUND RD(A)			0	G	472	80	87	
Drill Date		Well Data						
6/19/1978	·	CHICOT AQUIFE	R					
	GPS Longitude (decimal)	GPS Elevation	GPS Date	GPS Cert. No.	o. Seller			
29.736389	95.091392	0			Not	a Purchase	d Source	

(Inactive/Offline Sources)	
(No inactive Sources associated with this EP/Plant)	

Code Explanations

Monitoring Type Codes: (GW) GROUNDWATER,(GWP) GROUNDWATER - PURCHASED,(GUP) GROUNDWATER UNDER THE INFLUENCE - PURCHASED,(SWP) SURFACE WATER - PURCHASED,(GU) GROUNDWATER UNDER THE INFLUENCE OF SURFACE WATER,(N) NO SOURCES,(SW) SURFACE WATER

Activity Status Codes: (A) ACTIVE , (C) CCN CANCELLED , (D) DELETED/DISSOLVED , (G) SB 361 , (I) INACTIVE , (M) MERGED/ANNEXED , (N) NON-PUBLIC , (P) PROPOSED , (U) UNKNOWN , (W) UTILITY WATER SYS XFER

Operational Status Codes: (C) CAPPED, (D) DEMAND, (E) EMERGENCY, (F) FORMER PWS SOURCE, (I) INACTIVE PWS SYSTEM, (N) NON-DRINKING WATER, (O) OPERATING, (P) PLUGGED, (T) TEST, (Y) PWS NOT ACTIVE AND NOT EXPECTED TO BE SO

Source Types: (G) GROUND WATER, (S) SURFACE WATER, (U) GROUND WATER UNDER THE INFLUENCE

- End of Report -

At the time of your query this data was the most current information available from our database, which is in real time. Every effort was made to retrieve it according to your query. Thank-you for using WUD.

Texas Commission on Environmental Quality. Texas

Molecular. PWS #1012699. PWS-System Flow Diagram.

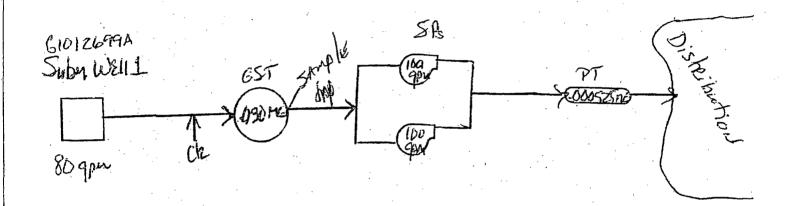
Investigation #553767. March 13, 2007. 1 page.

PWS - SYSTEM FLOW DIAGRAM

Name of System:	Texas Molecular		Additional ID(s)	1012699
Investigation#	553767	Investigation Date	03/13/2007	

Description of Sources, Treatment, Entry Points and Distribution

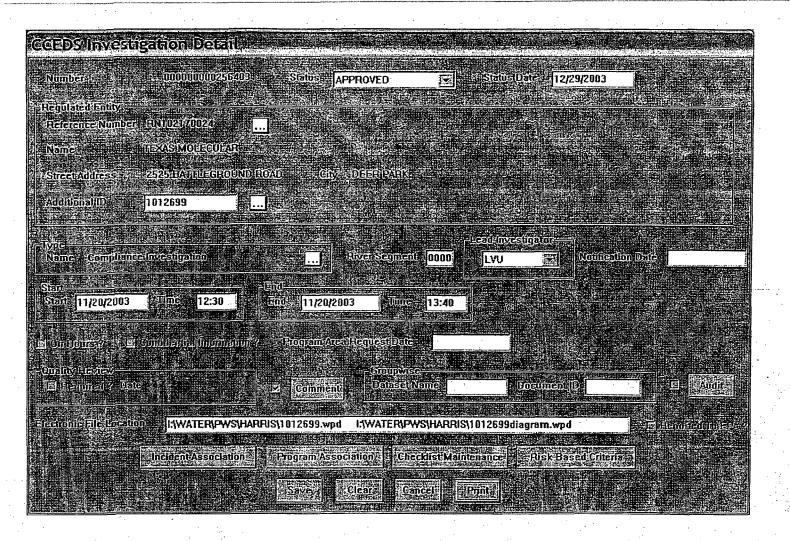
Labelling: owner's source names and TCEQ wtrsrc code designation, types of treatment and chemicals, entry points to distribution, entry point sample taps, booster disinfection, distribution connections and layout (if possible).



Texas Commission on Environmental Quality.

Consolidated Compliance and Enforcement Data

System. Texas Molecular Investigation List. 8 pages.



Investigation Comment

Summary

An investigation of Texas Molecular was conducted on November 20, 2003. Present at the investigation were Mr. Jim Robbins, Environmental Manager, who can be contacted at [281]930-2587, and Mr. Steve Kupferer. The NTNC water system, which consists of 1 well, 1 GST, 2 SPs, treatments and distribution, provides service to the plant. It is operated by its employees. An exit interview was conducted at the conclusion of the investigation with Mr. Robbins and Mr. Kupferer. During the investigation, a violation was noted. Please see attached Summary of Investigation Findings.

PWS ID: 1012699 Retail Service Conns: 2 Retail Meters: 0 Retail

Population: 25 people/day Wholesale Master Meters: 0

Wholesale Service Conns: 0 Wholesale Population:

0

I/C: None Name of I/C: Type of I/C: Nearest PWS: 0.2 mile from Trimac

DSI Transport

Total # cert. Ops.: 1 Grade(s)/Type(s): C-GW

Exception/Variances: NA

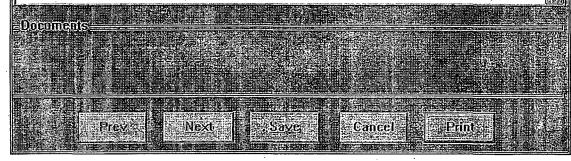
Location: One plant located at 2525 Battleground Rd.

EP 001 at 2525 Battleground Rd consists of: ground water, 1 subm. well, 1 GST, 2

SPs, and distribution.

Treatments: Gas chlorine injected prior to GST.

Emergency Power: None



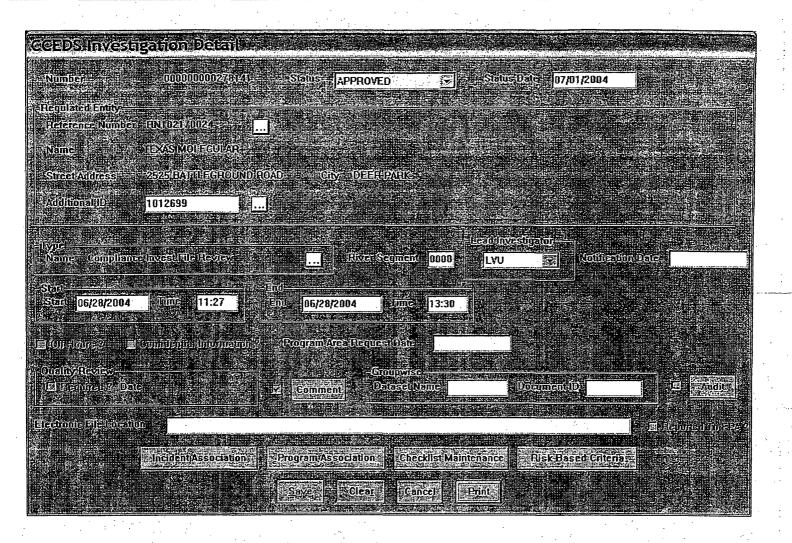
Investigation. Comment SPs, and distribution. Treatments: Gas chlorine injected prior to GST. Emergency Power: None Demands/Usage Max Daily usage: 0.002 MG Date: January 2003 Avg. Daily Usage: 0.0007 MG Time Period: January - September 2003 Wholesale Contract: -Maximum Purchase Rate: -Microbiological/Chemical Monitoring Bacteriological Samples required: 1/month **Bacteriological Samples Collected:** 1/month Raw Samples required: 0 Raw Samples Collected: 0 Non-Comm Dates of Operation: January - December Acceptable Sample Siting Plan on File: Yes Chlorine Residual in Distribution: 1.48 Mg/L FREE Tested psi: 90 Location Tested: Behind control room Date of last chemical analysis IOC(8-27-01), NO3(8-27-01), RC(-), VOC(8-27-01), SOC(-) Unacceptable Values: None **Proper Notification?** . Date: System Facility Capacities Total Well/Raw Water Capacities: 87 GPM = 0.12528 MGD

Investigation Comment Entry Point: Well No.(S.Code) / Location / Status / Depth / Pump Type /GPM (R/T) / Date 1:1 G1012699A 2525 Battleground Rd Operation 472' Subm Rated 87 GPM Storage Reservoirs and Pressure Tanks Туре Capacity Material Location GST 0.030 MG Welded steel Well site Service Pumps **Output GPM** Location No. 100 Well site 100 Well site 2 System Capacities Required Provided Meets (Y/N) | Well Prod.: 24 gal/pers/day X 25 people/day/1440 min/day = 0.417 GPM 87 GPM X Conn = 0.00022 MG 0 MG Pressure[gal/conn]: X Conn = 0 MG Ground(gal/conn): 0.03 MG N/A Svc. Pumps(gpm/conn): X Conn = 0 GPM 200 GPM N/A Svc. Pump Peaking Factor: (MDDgals/1440): = GPM GPM:** * Factor 1.25 for Elevated Tanks or 1.85 for Pressure Tanks, MDD listed in gallons ** Calculate Peaking Factor if > than 250 conns, have 1000 gpm and do not meet 2 gpm/conn; for .6 if 200 gals/conn EST); calculate with largest pump out of service. Document

dayestication Comment Storage Reservoirs and Pressure Tanks Type Capacity Material Location Well site **GST** 0.030 MG Welded steel Service Pumps **Output GPM** Location No. Well site 100 100 Well site 2 System Capacities Required Provided Meets (Y/N) Well Prod.: 24 gal/pers/day X 25 people/day/1 440 min/day = 0.417 GPM 87 GPM Pressure(gal/conn): 0 MG X Conn = 0.00022 MGGround(gal/conn): X Conn = 0 MG 0.03 MG N/A Svc. Pumps(gpm/conn): X Conn = 0 GPM 200 GPM N/A Svc. Pump Peaking Factor: = GPM (MDDgals/1440): **GPM:**** * Factor 1.25 for Elevated Tanks or 1.85 for Pressure Tanks, MDD listed in gallons ** Calculate Peaking Factor if > than 250 conns, have 1000 gpm and do not meet 2 gpm/conn; (or .6 if 200 gals/conn EST); calculate with largest pump out of service. Interconnection calculations Not required since system is not a community system.

Regulated Ent	ity Texas:	MOLECULAR "			The state of the s	2	
Respondent		II GROUP INC #			TO SEE THE	medito Entorcement	
Tracking Numb	ber 150228	Stat	VS RESOLVED		Status Date # [06/28/2004	1000
Category		Sub Category		Z Ri	epenie 🧠 EPA Class	incation : N/A	
Allegation 🐉	Failure to pr	ovide a minimum	pressure tank capac	city of 220 gallons.		The second secon	<u>a</u>
1 整装						•	
		Charles and the second					, V
Start				======================================		incombined to the state of the	
E William	py pate		Time 00:00	Pa Onkin	owi 7 Date 06/28/2004	4 Time 00:00	
■☑ Ł Descri	iption . H	istory 📲 🖫	Corrective Action Re	commendation 2%	M: Resolution	Gommen	is .
- Compliance	and the second s		stell / PlantRéceive	ana V	s Letassification MIN	NOR	—a
ude bate ju	MANIE TO	28 (1) (1)	- ru i galijana-arva				
EIC Varianc Hequest							
Date:		Type,		园 Respo	nse Daic	Disproved?	
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<u> </u>	7050 (200)	Ü		ra androginaryo, arjud samo Cili samo androgeniary		Requirement Provisio	ns.
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		Programme and the second	Save Clear.	Gancel	(Paint)		

7 9



Investigation Comment - : : : : : : : : : : : : : : : : : :	
This report is written to resolve the open violation cited during the site investigation conducted on November 20, 2003. See investigation # 256403 for more information.	Δ
conducted on Movember 20, 2003. See investigation # 230403 for more information.	
- Documents	
Prev Next & Save Cancel & Firint	

Texas Commission on Environmental Quality. Texas
Molecular. PWS #1012699. Document addressed to
Casey Borowsky, Chief Executive Officer. Subject:
Ground Water Contamination Confirmed: MTBE. May 8,
2009. 2 pages.

Buddy Garcia, Chairman Larry R. Soward, Commissioner Bryan W. Shaw, Ph.D., Commissioner Mark R. Vickery, P.G., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 8, 2009

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Texas Molecular

Attn: Casey Borowsky, (Responsible Official)

PO Box 1914

Deer Park, TX: 77536-1914

Subject: GROUND WATER CONTAMINATION CONFIRMED: MTBE

Texas Molecular - PWS ID# 1012699

Harris County, Texas

Dear Water System Official:

Results of samples collected from Entry Point 001 (2525 Battleground Rd) and Well A (Well 1 - 2525 Battleground Rd) at your water system confirm ground water contamination with the chemical Methyl tertbutyl ether (MTBE). The latest results are listed below, and copies of the most recent individual results are attached. Field blanks were taken to rule out air contamination at the sampling site. Although MTBE is not regulated at this time, it is indicative of a fuel contamination. MTBE is a man-made chemical used as a fuel additive. Though you have had these detections, your water system is not in violation of drinking water standards because of these detections.

Chemical	Detected Level (µg/L)	MCL (µg/L)	Site	Sample Date	Lab ID#
МТВЕ	3.32 †	None	Well G1012699A (Well 1 – 2525 Battleground Rd)	05/01/2009	0905062-001
MTBE	3.5 † .	None	'EP001	03/23/2009	AA94890
MTBE	3.3 †	None	, EP001	03/10/2008	AA54224
MTBE	3.2 †	None	EP001 ;	04/09/2007	AA10819
MTBE ,	5.9 †	None	'EP001.	11/01/2006 :	AA03483 .

†Field blank was non-detect; ND-Not Detected

Because of these detections, the entry point served by this well will be considered vulnerable to contamination. State and federal regulations may require that we continue to sample your entry point quarterly for VOCs because of this contamination. This sampling is in order to ensure that levels of regulated chemicals do not exceed the maximum contaminant level (MCL), so that public health is protected. After it is determined that levels are reliably and consistently below applicable MCLs, sampling may continue annually. Failure to submit to sampling or failure to pay for analyses will result in monitoring and reporting violations, and referral to enforcement.

This case will be referred to the TCEQ's Impact Evaluation Team to determine if notification of private well owners in the vicinity of this contaminated well is warranted under the provisions of Texas House Bill 3030. Your local health official, county judge and local groundwater conservation district, if applicable, have also been notified of this groundwater contamination in accordance with state law (Texas Water Code §5.236).

We recommend you contact the Drinking Water Protection team at (512) 239-4691 to investigate the source of this contamination and its potential impact on other wells in the area.

If you have any questions or need further information, please contact me at (512) 239-4528 or gregner@tceq.state.tx.us. If I am unavailable you may contact any member of the Drinking Water Quality Team at (512) 239-4691.

Sincerely,

Gary Regner, Drinking Water Quality Specialist

Organic Chemical Compliance

Public Drinking Water Section, MC-155

Enclosures

cc: (by CERTIFIED MAIL)

Honorable Ed Emmet, Harris County Judge, 1001 Preston, Ste. 911, Houston TX 77002 Hermina Palacio, MD, Harris Co Health Services Director, 2223 West Loop South, Houston, TX 77027 Harris-Galveston Coastal Subsidence District, 1660 West Bay Area Blvd, Friendswood, TX 77546-2640

cc: (by Regular Mail)

Barry Price, TCEO, Region 12

Reyna Miner, Technical Review & Oversight Team, TCEO, MC-155

Sean Ables, Drinking Water Protection Team, TCEQ, MC-155

Groundwater Planning & Assessment Team, TCEQ, MC-147

SSDAP, TCEQ, MC-136

VCP, TCEO, MC-221

Chief Engineer's Office, TCEQ, MC-203

Waste Manager, Field Operations Division, TCEQ, MC-174

Railroad Commission, Site Remediation Section, Bill Miertschin, Assistant Director

Texas Commission on Environmental Quality. Water Quality Summary. Texas Molecular. PWS#1012699. 4 pages.

Water Quality Summary -

TEXAS MOLECULAR PWS ID# 1012699

Region 12

PUBLIC DRINKING WATER

HARRIS County



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

VOC			•	•			
LAB ID	TCEQ ID		Collected:	4/7/1995	Lab: X	Data Entry:	 .
Chemical		µg/I	POE: 001	Well:			`
							
	TCEQ ID	_	Collected:		Lab: T	Data Entry: MR	D 11/18/1998
Chemical		hg/l	POE: 001	Well:		· · · · · · · · · · · · · · · · · · ·	
LAB ID EP113180	TCEQ ID		Collected:	8/27/2001 DBR	Lab: T	Data Entry: FGA	9/4/2001
Chemical		µg/I	POE: 001	Well:			
BROMODICHLOROMET H	ANE	2.7					
BROMOFORM		5.0				•	
CHLOROFORM		8.0			•	•	
DIBROMOCHLOROMET H	HANE	6.8		•			
TOLUENE	•	0.9					•
LAB ID EP528110	TCEQ ID 05	18991	Collected:	10/13/2005 JPE	Lab: T	Data Entry: EDF	11/15/2005
Chemical ·		µg/i	POE: 001	Well:		·	
BROMOFORM		2.5					
CHLOROFORM		6.6		•			
DIBROMOCHLOROMET F	HANE	7.6					
DICHLOROBROMOMET F	HANE	8.9	•	•			•
ETHYLBENZEN E		2.5	100			*	
M&P-XYLENE		7.2					
METHYL T-BUTYL ETHE	R (MTBE)	18		٠.			
O-XYLENE	• • • •	8.8					
•			Comm	ents: VOC			
LAB ID EP601405	TCEQ ID 06	15628	Collected:	1/23/2006 JOL	Lab: T	Data Entry: EDF	2/9/2006
Chemical		µg/l	POE: 001	Well:			
BROMOFORM		1.1					:
CHLOROFORM		1.9					
DIBROMOCHLOROMET F	HANE	4.3					
		~ ~					

Comments: VOC-FB

Well:

Comments: VOC

4/6/2006 JOL Lab: T Data Entry: EDR

Collected:



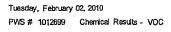
DICHLOROBRUMOMET HANE

LAB ID EP607290

Chemical

4/20/2006

LAB ID EP607291 TCEQ ID	0615626	Collected:	4/6/2006	JOL	Lab: T	Data Entry: EDR	4/20/2006
Chemical	μg/l	POE: 001	Well:			•-	*
BROMOFORM	2.8						
CHLOROFORM	3						
DIBROMOCHLOROMET HANE	6.1						
DICHLOROBROMOMET HANE	4.7						
ETHYLBENZEN E	2.3						
M&P-XYLENE	5.1						
METHYL T-BUTYL ETHER (MTBE)							
O-XYLENE	5.3						
U-X TEENE	5.5	Comme	ents: VOC				
LAB ID EP610486 TCEQ ID	0690755			G C	Lab: T	Data Entry EDD	6435008
Chemical		Collected:	Well:	5	Lab: 1	Data Entry: EDR	6/13/2008
	μg/l	POE: 001	wen:		 		
CHLOROFORM	1.8					•	
TOLUENE	2.1						,
		Comm	ents: VOC-F	В			
LAB ID EP610487 TCEQ ID	0690755	Collected:	5/22/2006	GS	Lab: T	Data Entry: EDR	6/13/2006
Chemical	. µg/i	POE: 001	Well:				
BROMOFORM	0.8						
CHLOROFORM	2.9					•	
DIBROMOCHLOROMET HANE	0.6						
DICHLOROMETHAN E	0.7						
TOLUENE	3.3		•				
TOLOLIVE	0.0	Comm	ents: VOC			•	
LAB ID EP613737 TCEQ ID	0615629			100	1 -b. T	Data Estan CDD	749/2000
		Collected:		JOL	Labi, I	Data Entry: EDR	7/18/2006
Chemical	µg/l	POE: 001	Well:				
ACETALDHYD E	1.1						\$
BUTANAL	1.3						
		Comm	ents: VOC-F	В			
LAB ID EP613738 TCEQ ID	0615629	Collected:	7/6/2006	JOL	Lab: T	Data Entry: EDR	7/18/2006
Chemical	μg/l	POE: 001	Well:				
1,2,4-TRIMETHYLB ENZENE	1						
1,3,5-TRIMETHYLB ENZENE	1.1		,				
ACETALDHYD E	1.2						
ACETONE .	. 10				4		•
BROMOFORM	5.7	•		•			•
BUTANAL	1.4	•					
C3-BENZEN E	1.1						
CHLOROFORM	5.4						
DIBROMOCHLOROMET HANE	12						
DICHLOROBROMOMET HANE	9.3						
ETHYLBENZEN E	3.6						
				1.8	٠.		
M&P-XYLENE	10						
METHYL T-BUTYL ETHER (MTBE,		1	1. 1. 1. 1. 1.				
O-XYLENE	11	0	VOC				
			ents: VOC				
	0615627	Collected:		JOL	Lab: T	Data Entry: EDR	11/30/2006
Chemical	μg/i	POE: 001	Well:				





	•								
LAB ID AA03483	TCEQ ID	0615627	Collected:	11/1/2006	JOL	Lab: T	Data Entry:	EDR	11/22/2006
Chemical		μgų	POE: 001	Well:					
Bromodichloromethane		10							
Bromoform		5.6					•		
Chloroform	*	5							
Dibromochloromet hane		13							
Ethylbenzene		2.6		•					
m&p-Xylene		4.7							
Methyl-t-butyl ether (MTB	E)	. 5.9							
o-Xylene		7.2							
LAB ID AA10818	TCEQ ID	0720900	Collected:	4/9/2007	200	Lab: T	Data Entry:	EDR	5/4/2007
Chemical		μg/l	POE: 001	Well:					
•									
LAB ID AA10819	TCEQ ID	0720900	Collected:	4/9/2007 [210	Lah: T	Data Entry:	FOR	4/20/2007
Chemical	I OLIGIE	μg/l	POE: 001	Well:	~~	шь	Dum Ciniy.	LUIT	4/20/2001
		0,9	102.001	TTON.					
Bromodichloromethane		2.5							
Bromoform Dibromochloromethane		2					•		
	(E)	3.2							
Methyl-t-butyl ether (MTB LAB ID AA54223		0820969FB	C-114- d	040000	A B 61	Laber T	D-4- E-4	EDD	0.04.0000
Chemical	ICEU ID	ug/i	Collected:	3/10/2008 / Well:	4IVII	Lab: 1	Data Entry:	EUK	3/31/2008
Chemical		рун	POE: 001	weit.		-			
		•							
LAB ID AA54224	TCEQ ID	0820969	Collected:	3/10/2008	AMI	Lab: T	Data Entry:	EDR	3/17/2008
Chemical		µg/l	POE: 001	Well:					
Bromoform		3.5		•					
Dibromochloromet hane		0.9							
Methyl-t-butyl ether (MTE	E)	3.3							
LAB ID. AA94889	TCEQ ID	0918645FB	Collected:	3/23/2009	EMI	Lab: T	Data Entry:	EDR	4/10/2009
Chemical		μg/l	POE: 001	Well:			•		
			; i	· · · · · · · · · · · · · · · · · · ·			•		
LAB ID AA94890	TOEO ID	0918645	Collected:	202000		I ob. T	Data Entry:	EDD	4402000
Chemical	I CE Q ID	pg/l	POE: 001	3/23/2009 Well:	CIVII	Lau.	Data Entry.	CUR	4/10/2009
			POE. 001	WCH.					
Bromodichloromethane		0.7			•				
Bromoform	•	6.7	•						
Dibromochloromethane		3.8						•	•
Methyl-t-butyl ether (MTE	(E)	3.5							_
Xylenes (total)		8.0	C	All .			. :_		
				ents: J= Alic				·	
LAB ID EP610488	TCEQ ID	0690756	Collected:				Data Entry:	EDR	6/13/2006
Chemical		pg/l	POE: R	Well: G101	269	9A			
CHLOROFORM		2	•						
T-BUTYL ALCOHOL		1.4							
TOLUENE		2.5		•					
•			Comm	ents: VOC-F	B/RA	W.	•		
LAB ID EP610489.	TCEQ ID	0690756	Collected:	5/22/2006	GS	Lab: T	Data Entry:	EDR	6/13/2006
Chemical ·		μgЛ	POE: R	Well: G10					
CHLOROFORM		2.6							• • • • • • • • • • • • • • • • • • • •
T-BUTYL ALCOHOL		3.8				•			
TOLUENE		3.4							
IULUENE		3.4	_					•	

Comments: VOC/RAW

Tuesday, February 02, 2010 PWS # 1012699 Chemical Results - VOC



LAB ID 0905062002	TCEQ ID 0991237FB	Collected:	5/1/2009 EMI Lab: L	Data Entry: EDR	5/29/2009
Chemical	µg/l	POE: R	Well: G1012699A		
Acetone	11.7				
LAB ID 0905062001	TCEQ ID 0991237	Collected:	5/1/2009 EMI Lab: L	Data Entry: EDR	5/29/2009
Chemical	. μg/l	POE: R	Well: G1012699A		
Meth yl tert-but yl ether (l	MTBE) 3.32				
LAB ID 0912225002	TCEQ ID 0991094FB	Collected:	12/7/2009 DBR Lab: L	Data Entry: EDR	12/14/2009
Chemical	µg/l	POE: R	Well: G1012699A		· · · · · · · · · · · · · · · · · · ·
LAB ID 0912225001	TCEQ ID 0991094	Collected:	12/7/2009 DBR Lab: L	Data Entry: EDR	12/14/2009
Chemical	hg/l	POE: R	Well: G1012699A		
Methyl tert-hut vl ether (MTRE 2.4				



Environmental Protection Agency. Methyl Tertiary Butyl Ether. November 24, 2008. 10 pages.



http://www.epa.gov/mtbe/faq.htm Last updated on Monday, November 24, 2008 Methyl Tertiary Butyl Ether (MTBE)

You are here: <u>EPA Home</u> <u>Transportation & Air Quality</u> <u>Fuels and Fuel Additives</u> <u>MTBE</u>
Overview

Overview

The following list of Frequently Asked Questions is the inquiries we received on MTBE intended to provide basic background information on MTBE. If you want more detailed information, please see the last section, "Additional Information" which provides links to other EPA Web sites on MTBE and local information.

Note: Some terms in this document link to other EPA and non-EPA Web sites or documents on that topic. Links going to non-EPA sites are identified with an EXITEDISCHAIMED symbol.

- MTBE in Fuels
- Concerns about MTBE
- Drinking Water Quality
- Occurrence
- Movement and Disposition of MTBE in the Environment
- Cleaning Up MTBE
- Preventing MTBE Leaks
- Research and Testing
- What the experts say about MTBE
- Actions to Address MTBE Concerns
- Additional Information

NOTE: You will need Adobe Acrobat Reader, available as a free download, to view some of the files on this page. See EPA's PDF page to learn more about PDF, and for a link to the free Acrobat Reader.

MTBE in Fuels

What is MTBE?

MTBE (methyl tertiary-butyl ether) is a chemical compound that is manufactured by the chemical reaction of methanol and isobutylene. MTBE is <u>produced</u> in very large quantities (over 200,000 barrels per day in the U.S. in 1999) and is almost exclusively used as a fuel additive in motor gasoline. It is one of a group of chemicals commonly known as "oxygenates" because they raise the oxygen content of gasoline. At room temperature, MTBE is a volatile, flammable and colorless liquid that dissolves rather easily in water.

Why is it used?

MTBE has been used in U.S. gasoline at low levels since 1979 to replace lead as an octane enhancer (helps prevent the engine from "knocking"). Since 1992, MTBE has been used at higher concentrations in some gasoline to fulfill the oxygenate requirements set by Congress in the 1990 Clean Air Act Amendments. (A few cities, such as Denver, used oxygenates (MTBE) at higher concentrations during the wintertime in the late 1980's.)

Oxygen helps gasoline burn more completely, reducing harmful tailpipe emissions from motor vehicles. In one respect, the oxygen dilutes or displaces gasoline components such as aromatics (e.g., benzene) and sulfur. In another, oxygen optimizes the oxidation during combustion. Most refiners have chosen to use MTBE over other oxygenates primarily for its blending characteristics and for economic reasons.

What are the oxygenate requirements of the Clean Air Act?

The Clean Air Act Amendments of 1990 (CAA) require the use of oxygenated gasoline in areas with unhealthy levels of air pollution. The CAA does not specifically require MTBE. Refiners may choose to use other oxygenates, such as ethanol. The two oxygenated gasoline programs are:

<u>Winter Oxyfuel Program</u>: Originally implemented in 1992, the CAA requires oxygenated fuel (gasoline containing 2.7 percent oxygen by weight) during the cold months <u>in cities (PDF)</u> that have elevated levels of carbon monoxide. Ethanol is the primary oxygenate used in this program.

Year-round Reformulated Gasoline Program: Since 1995, the CAA requires reformulated gasoline (RFG) year-round in cities with the worst ground-level ozone (smog). RFG is oxygenated gasoline (minimum of 2 percent oxygen by weight) that is specially blended to have fewer polluting compounds than conventional gasoline. At this time, about 30 percent of this country's gasoline is reformulated gasoline, of which about 87 percent (PDF) (6 pp, 32K) contains MTBE. Refiners have chosen MTBE as the main oxygenate in RFG in cities outside of the Midwest primarily for economic reasons and its blending characteristics. Unlike ethanol, MTBE can be shipped through existing pipelines, and its volatility is lower, making it easier to meet the emission standards.

To address its unique air pollution problems, California has adopted similar, but more stringent requirements for its gasoline (California RFG). [EXIT DISCIDIMENT)

What are the <u>air quality benefits</u> of using reformulated gasoline (RFG) that contains oxygenates?

RFG has been helping improve the air for millions of Americans since 1995. The use of RFG compared to conventional gasoline has resulted in annual reductions of smog-forming pollutants (volatile organic compounds and nitrogen oxides) and toxics (such as benzene). With the second phase (PDF) (2 pp, 128K, EPA420-F-99-042, November 1999) of RFG program, which began January 2000, EPA estimates that smog-forming pollutants are being reduced annually by at least 105 thousand tons, and toxics by at least 24 thousand tons. Refiners are required to reduce the emissions of volatile organic compounds, toxics, and nitrogen oxides by 27, 22, and 7 percent, respectively, compared to the conventional gasoline they produced in 1990.

Concerns about MTBE

With these air quality benefits, why is there concern with the use of MTBE?

A growing number of studies have detected MTBE in ground water throughout the country; in some instances these contaminated waters are sources of drinking water. Low levels of MTBE can make drinking water supplies undrinkable due to its offensive taste and odor.

Is MTBE harmful to humans?

The majority of the human health-related research conducted to date on MTBE has focused on effects associated with the inhalation of the chemical. When research animals inhaled high concentrations of MTBE, some developed cancers or experienced other non-cancerous health effects To date, independent expert review groups who have assessed MTBE inhalation health risks (e.g., Interagency Assessment of Oxygenated Fuels) have not concluded that the use of MTBE-oxygenated gasoline poses an imminent threat to public health. However, researchers have limited data about what the health effects may be if a person swallows (ingests) MTBE. EPA's Office of Water has concluded that available data are not adequate to estimate potential health risks of MTBE at low exposure levels in drinking water but that the data support the conclusion that MTBE is a potential human carcinogen at high doses. Recent work by EPA and other researchers is expected to help determine more precisely the potential for health effects from MTBE in drinking water.

EPA reviewed available health effects information on MTBE in its 1997 <u>Drinking Water Advisory</u> guidance and decided that there was insufficient information available to allow EPA to establish quantitative estimates for health risks and as such would not set health advisory limits. The drinking water advisory document indicates that there is little likelihood that MTBE in drinking water will cause adverse health effects at concentrations between 20 and 40 ppb or below.

Drinking Water Quality

Has EPA set a drinking water health standard for MTBE?

EPA has not set a national standard for MTBE, although some <u>states</u> have set their own limits. EPA will issue a secondary drinking water standard, based on taste and odor, by late Fall 2000. This taste and odor standard will serve as a guideline that states may adopt. In December 1997, EPA issued a <u>Drinking Water Advisory</u> that states concentrations of MTBE in the range of 20 to 40 ppb of water or below will probably not cause unpleasant taste and odor for most people, recognizing that human sensitivity to taste and odor varies widely. The advisory is a guidance document that recommends keeping concentrations below that range. EPA also reviewed the available information on health effects in the 1997 advisory and stated that there is little likelihood that MTBE concentrations between 20 and 40 ppb in drinking water would cause negative health effects.

EPA is continuing to study both the potential health effects and the occurrence of MTBE, and it is on a list of contaminants (Contaminant Candidate List) for which EPA is considering setting health standards. As a means of gathering occurrence information, beginning in 2001, EPA will require all large drinking water systems and a representative sample of small systems to monitor and report the presence of MTBE (Unregulated Contaminant Monitoring Regulation).

How do I know if I have MTBE in my water?

It is possible your water would taste and/or smell like turpentine if MTBE is present at levels around or above 20-40 ppb (some people may detect it at even lower levels). Though you cannot currently purchase a home testing kit, you can determine if your water contains MTBE the following ways. If your drinking water is supplied by a public water system, you can contact the system directly and ask whether they monitor for MTBE and what levels, if any, have been detected. In 2001, most public water systems will be required to monitor for MTBE. If you have a private well, you may want to have your well water tested. Your local health department may be able to tell you if MTBE has been found in water in your area. If you want to get your water tested, call the Safe Drinking Water Hotline (800-426-4791) or go to https://www.epa.gov/safewater/faq/sco.html to get the phone number for the office in your state that certifies drinking water laboratories.

Occurrence of MTBE in Water

How does MTBE get in drinking water sources?

There are opportunities for MTBE to leak into the environment (and potentially get in drinking water sources) wherever gasoline is stored, and there are opportunities for it to be spilled whenever fuel is transported or transferred. While federal and state programs minimize the potential for <u>leaks and spills</u>, no system is foolproof.

Contamination of drinking water sources can occur from leaking underground and above ground fuel storage tanks, pipelines, refueling spills, automobile accidents damaging the fuel tank, consumer disposal of "old" gasoline", emissions from older marine engines, and to a lesser degree, storm water runoff, and precipitation mixed with MTBE in the air (EPA's Office of Ground Water and Drinking Water) or (USGS report).

How widespread and at what levels is MTBE contamination in water supplies?

Although there are no nation-wide data sets from which to fully characterize MTBE contamination of water, a growing number of studies to-date have detected MTBE in drinking water supplies throughout the country. Current data on MTBE levels in ground and surface waters indicate widespread and numerous detections at low levels of MTBE, with a more limited number of detections at higher levels (only about 1 percent of concentrations are more than 20 parts per billion (ppb) as discussed in the 1999 Blue Ribbon Panel Report on Oxygenates in Gasoline). Studies have shown that MTBE is detected in water roughly five times more often and at higher concentrations in areas of the country where federal RFG is sold (i.e., where there is an oxygenate mandate).

When MTBE is detected, the levels are typically below 20 ppb which is lower than EPA's <u>Drinking Water Advisory</u>. However, releases from petroleum storage tanks, and pipeline breaks or other point sources can cause high concentrations of MTBE in water. When such releases occur, the resulting localized concentration can be much higher than the EPA's advised taste and odor acceptable range (EPA's Office of Ground Water and Drinking Water).

What is the status of the drinking water contamination in Santa Monica, CA, the city with the first significant incidence of MTBE contamination?

In 1996, the city of Santa Monica learned that two of its drinking water wellfields, Charnock

and Arcadia, were contaminated with MTBE at levels as high as 610 ppb and 86 ppb respectively. In response, the two wellfields, representing 50 percent of the city's drinking water supply were shut down and the city began purchasing replacement water. This incident was the first major water contamination which brought public attention to MTBE.

EPA's <u>Region 9</u> and the Los Angeles Regional Water Quality Control Board (RWQCB) are pursuing a joint enforcement action at the <u>Charnock</u> wellfield in Santa Monica. Site-specific clean-up is underway. At the smaller Arcadia wellfield, the RWQCB has the lead while EPA provides technical support and field oversight of the clean-up.

Movement and Disposition of MTBE in the Environment

What happens when MTBE gets into the environment?

Because MTBE dissolves easily in water and does not "cling" to soil very well, it migrates faster and farther in the ground than other gasoline components, thus making it more likely to contaminate public water systems and private drinking water wells. MTBE does not degrade (breakdown) easily and is difficult and costly to remove from ground water.

How long will MTBE remain in water?

MTBE is generally more resistant to natural <u>biodegradation</u> than other gasoline components. Some monitoring wells have shown little overall reduction in MTBE concentration over several years which suggests that MTBE is relatively persistent in ground water. In contrast, <u>studies of surface water (lakes and reservoirs)</u> <u>EXITADISCIAIMED</u> have shown that MTBE volatilizes (evaporates) relatively quickly.

Cleaning Up MTBE

Can we clean up releases of MTBE in soil and water?

Although often difficult and time consuming, MTBE contamination can be cleaned up (PDF) (5 pp, 37K, EPA 510-F-97-015, January 1998) in the soil and water using existing technologies such as air stripping, granular activated carbon (GAC), advanced oxidation, and soil vapor extraction (SVE). These technologies are discussed below. The latter three have been used successfully at individual homes with impacted drinking water wells. Some home treatment units can also remove MTBE in tap water. You can obtain a list of home treatment units that are certified by a non-profit agency, The National Sanitation Foundation. [EXISTIBLE STREET PROFITE STREET PROFITE STREET PROFITE STREET PROFITE PROFI

When soil is contaminated with MTBE, treatment may be even easier than for other gasoline compounds since pure MTBE has a high vapor pressure and does not sorb ("stick") easily to organic carbon in soil. When MTBE is dissolved in water, MTBE treatment may be more difficult and time consuming than for other gasoline compounds.

The levels to which contaminated ground water is cleaned up can vary as well as the

methods used. If the ground water is used for drinking, it is often times treated more rigorously to avoid unpleasant taste and odor and to protect against potential health effects, thereby restoring it to potable condition.

Although MTBE does not readily degrade in soil and water under most natural conditions, some <u>laboratory and field studies</u> have shown promising results using bacterial cultures to degrade the MTBE.

How are the technologies used to remove MTBE from soil and/or water?

SVE technology pulls air through the soil to volatilize (vaporize) contaminants. MTBE vapors that are extracted or vacuumed from the soil must be collected, properly treated, and disposed of to prevent further contamination.

GAC treatment technique pumps contaminated water through a bed of activated carbon to remove organic compounds. Since MTBE does not sorb ("stick") well to organics such as carbon, high volumes of the contaminated water must repeatedly pass through a GAC system before MTBE is effectively removed. Though less effective for MTBE, many individual homeowners use small carbon canisters to remove a variety of contaminants, including MTBE, from impacted private wells.

Air stripping is a process in which contaminated water is passed through a column filled with packing material while upward-flowing air removes chemicals from the water. In general, these vapors should not be released directly into the air and therefore, should be appropriately treated. MTBE does not readily separate from water into the vapor phase, often necessitating high air to water ratios.

Activated oxidation technologies use appropriate combinations of ultraviolet light, chemical oxidants, and catalysts to transform contaminants. Oxidation technologies have been demonstrated to oxidize a wide range of organic chemicals, including MTBE.

Is it expensive to clean up MTBE?

MTBE can complicate remedial activities because of its greater water solubility and resistance to natural biodegradation. Thus, the costs can be higher than those associated with the treatment/remediation (PDF) (5 pp, 37K, EPA 510-F-97-015, January 1998) for benzene or other gasoline components.

Preventing MTBE Leaks

What is being done to prevent leaks from underground storage tanks (UST)?

The EPA believes that it is unacceptable to have any fuel component reach water sources. EPA's federal <u>UST regulations</u> are helping prevent contamination of water supplies from UST releases. However, no set of regulations can prevent all releases. Even with the most ideal regulations, there will continue to be some equipment failures and installation mistakes that result in releases. Nonetheless, EPA is working with states to improve the compliance rate with the leak detection requirements and the regulations that require all substandard UST's be upgraded (with spill, overfill, and corrosion protection), replaced, or properly closed. EPA is also undertaking a major multi-year effort with states to increase UST owners' and

operators' compliance rates through technical assistance, inspections, and enforcement.

What is being done to prevent leaks from pipelines?

Regulation of gasoline pipelines, another potential source of leaks, is under the jurisdiction of the U.S. Department of Transportation (DOT). DOT oversees an extensive <u>pipeline safety</u> <u>program</u> to minimize releases from pipelines.

Research and Testing

What MTBE research is underway or upcoming?

Though MTBE has been the subject of much research, substantial scientific uncertainties still exist. To facilitate the advancement of crucial scientific knowledge needed to assess and manage the potential health and environmental risks MTBE and other fuel oxygenates in the environment, EPA identified several key issues in Oxyfuels Information Needs (1996) and Oxygenates in Water: Critical Information and Research Needs (1998). Researchers at EPA and other governmental organizations industry, and academic institutions are conducting studies to learn more about MTBE. Many of these projects are listed in Appendix 2 of Oxygenates in Water: Critical Information and Research Needs.

What the experts say about MTBE

What did the Blue Ribbon Panel conclude and recommend?

In response to the growing concerns regarding MTBE in water, EPA's Administrator Browner appointed an independent <u>Blue Ribbon Panel</u> of leading experts from the public health, environmental and scientific communities, fuels industry, water utilities, and local and state governments. They were charged to investigate the air quality benefits and water quality concerns associated with oxygenates in gasoline, and to provide independent advice and recommendations on ways to maintain air quality while protecting water quality. They concluded, among other things, that MTBE detections have primarily caused consumer odor and taste concerns, and that in rare instances MTBE has been found in drinking water supplies at levels well above EPA's drinking water advisory and some <u>state standards</u>.

The Panel recommended the following:

- Removing the current congressional CAA requirement for 2 percent oxygen in RFG
- Improving the nation's water protection programs, including over 20 specific actions to enhance Underground Storage Tank, Safe Drinking Water, and private well protection programs
- Reducing the use of MTBE substantially nationwide
- Maintaining current air quality benefits
- Accelerating research on MTBE and its substitutes

Actions to Address MTBE Concerns

What additional steps is EPA taking to address concerns with MTBE?

EPA has taken the following actions to significantly reduce or eliminate MTBE, and to address prevention and remediation concerns. EPA is working closely with Congress, the states, and the regulated community to accomplish these efforts.

Congressional:

EPA is providing technical assistance to Congress to work toward a targeted legislative solution that addresses the Panel's recommendations. Specifically, EPA Administrator Browner and Agriculture Secretary Glickman released a <u>legislative framework</u> on March 20, 2000 to encourage immediate Congressional action to reduce or eliminate MTBE and promote consideration of renewable fuels like ethanol.

Regulatory:

Also on March 20, 2000, EPA Administrator Browner announced the beginning of regulatory action under the Toxic Substances Control Act (TSCA) to significantly reduce or eliminate use of MTBE in gasoline while preserving clean air benefits.

Drinking Water Protection Programs:

- EPA will issue a secondary drinking water standard, based on taste and odor, by late Fall 2000. This taste and odor standard will serve as a guideline that states may adopt.
- A <u>new rule</u> requires all large and a representative sample of small public water systems to monitor for MTBE in ground water and surface water beginning in 2001. EPA is encouraging water systems to begin monitoring prior to the 2001 implementation date.

Underground Storage Tanks (USTs) and Other Management Strategies:

- EPA is working with states to increase the compliance rate with the <u>spill</u>, <u>overfill</u>, <u>and corrosion portion</u> of the <u>UST regulations</u> continue improving the quality of USTs.
- EPA is working with states on a multi-year effort to improve the compliance rate with the leak detection requirements.
- EPA and states are conducting an <u>evaluation of UST systems</u> performance to verify and validate how effectively leak detection and other UST systems are working; by 2002 EPA will have valuable data to decide whether the UST regulations need to be revised.
- EPA recommended that <u>State UST/LUST officials (PDF)</u> (4 pp, 16K, January 2000) monitor and report MTBE and other ethers in ground water at all leaking UST sites. Where MTBE is detected, states are advised to take immediate and aggressive remedial action.
- EPA and states are developing a UST system operation and maintenance manual, available in late 2000, to help UST owners and operators understand and carry out good UST management practices to better prevent and detect leaks.

Remediation:

EPA is funding demonstration projects to determine the most effective approach

to MTBE remediation. MTBE remediation research efforts are also currently underway by other organizations such as the American Petroleum Institute and U.C. Davis.

Research:

Numerous research projects are underway by government organizations, universities, and industry. Information about research projects regarding oxygenates (including MTBE) in water is discussed in <u>Oxygenates in Water: Critical Information and Research Needs</u>". Among the topics covered in this document are source characterization, transport, transformation, occurrence, exposure, aquatic toxicity, health effects, release prevention, and contaminant removal. Appendix 2 of the document lists several current or recent research projects in these topic areas.

Additional Information

MTBE:

You can access additional documents related to MTBE from the following EPA Web sites:

Office of Transportation and Air Quality

This Web site contains documents related to MTBE in gasoline and its air quality benefits.

Office of Underground Storage Tanks

This Web site contains documents and links to information related to the storage of gasoline with MTBE in underground storage tanks.

Office of Ground Water and Drinking Water

This Web site contains documents related to MTBE in ground water and drinking water.

Blue Ribbon Panel:

You can access additional documents related to the Blue Ribbon Panel from the following EPA Web sites:

Clean Air Act Committee, Office of Air and Radiation

This Web site provides background information on the formation, purpose, and members of the Blue Ribbon Panel.

Office of Transportation and Air Quality

This Web site contains documents produced by or for the panel, including its Final Report.

Research:

You can access additional documents related to research of MTBE from the following EPA Web

sites:

EPA's <u>Office of Research and Development (ORD)</u> conducts research in support of the Agency's mission to help ensure that efforts to reduce environmental risk are based on the best available scientific information. ORD has several national labs and centers that are active in dealing with various aspects of oxygenates and oxygenated fuels:

Risk assessment and research strategies

EPA's National Center for Environmental Assessment (NCEA) has prepared health risk assessments and research strategies on MTBE and fuel oxygenates.

Exposure research

EPA's National Exposure Research Laboratory (NERL) has been conducting research on MTBE exposure issues utilizing a wide variety of measurement methods and exposure scenarios for several years.

Health and environmental effects research

EPA's National Health and Environmental Effects Research Laboratory (NHEERL) conducts research on the uptake, metabolism, and elimination of MTBE in humans.

Risk management research

EPA's National Risk Management Research Laboratory (NRMRL) conducts research on the treatment of sites and drinking water contaminated with MTBE.

Extramural environmental research grants

EPA's National Center for Environmental Research (NCER) administers EPA's Science to Achieve Results (STAR) Program, including funding on MTBE research under different competitive solicitations.

You can also call the Safe Drinking Water Hotline at 800-426-4791 for information and assistance about EPA's drinking water regulations, the wellhead protection program, source water protection and related guidance, and public education materials.

<u>Local Information</u> will tell you whom to contact in your area for more information on MTBE in drinking water.

Texas Commission on Environmental Quality. Texas
Molecular. PWS #1012699. Document addressed to
Casey Borowsky, Chief Executive Officer. Subject: Public
Drinking Water System-Texas Molecular. Year 2009
Chemical Sampling Schedule and Cost Estimate, and
Monitoring Frequency Status Report. . May 8, 2009. 2
pages.

H.S. Buddy Garcia, Chairman Larry R. Soward, Commissioner Bryan W. Shaw, Ph.D., Commissioner Mark R. Vickery, P.G., Executive Director



Texas Commission on Environmental Quality

Protecting Texas by Reducing and Preventing Pollution

January 20, 2009

SCE2009M

CASEY BOROWSKY, CHIEF EXECUTIVE OFFICER (RESPONSIBLE OFFICIAL) TM DEER PARK SERVICES LIMITED PARTNERSHIP (LEGAL ENTITY) PO BOX 1914 C/O ENVIRONMENTAL DEPARTMENT DEER PARK, TX 77536-1914

SUBJECT: Public Drinking Water System - TEXAS MOLECULAR

Year 2009 Chemical Sampling Schedule and Cost ESTIMATE, and Monitoring Frequency Status Report

(THIS IS NOT A BILL)

Dear Water System Official:

Enclosed are reports of sampling frequirements along with an

Enclosed are reports of sampling requirements and sample scillection, schedules to avoid water system, along with an estimate of analysis costs during calendar year 2009.

* The first report, titled "Monitoring Frequency Status" describes all of your system seament chemical monitoring required by the Texas Administrative Code (IAC) Chapter 30 Subchapter Fifthe second report, titled "Year 2009 Estimated Chemical Sampling Costs," lists the type and approximate analysis cost for each sample currently scheduled for 2009. This only an estimate. DO NOT SEND PAYMENT TO TCEQ.

The "Explanation for CHEMICAL SAMPLE COST ESTIMATE AND MONITORING FREQUENCY STATUS REPORTS" is also enclosed and available online at <www.tceg.state.tx.us/goto/pws/sampling/key>

REPORTS" is also enclosed and available online at <www.tceq.state.tx.us/goto/pws/sampling/key>.

* TCEQ collects_chemical_samples through_a sampling_contractor_Delta Consultants_(Deta) at (512) 990-7467, (800) 477-7411 for http://www.deftaenv.com. A Detailer resentative will contact you to schedule a sampling appointment A water system official must accompany the sampler during collections.

* You should attact a copy of this letter and reports to your Monitoring Plan for reference.

You must keep chemical records for ten years and update your contact information.

You must be prepared to make these records available to the general public and To Ecoupon request. If your system has a charge in ownership, responsible official accress, proone number etc., you must anom the ToEcoupon request. This information can be viewed using the Integrated Water Utilities Data iss (IWUD) on the internet at state by us/www/10 tree states by us/www/10 tree states by us/ww/10 tree states by us/www/10 tree states by us/ww/10 tree states by us/www/10 tree states by us/www/10 tree state http://www10.tceq.state.tx.us/iwud/. If any information in iWUD is incorrect for your system, please notify us by email at: <pdws@tceq.state .tx.us>, or by mail at the letterhead address.

You must maintain an up-to-date monitoring plan that lists sample sites and indicates them on a map-

Your system's operator must have the thioritioning Plant available for the Delta sample collector at each sampling event.

Failure to do so is a violation. On the web, search "Monitoring Plant" from TCECS home page for more information.

Your chemical compliance samples (except for ead and copper samples) are collected by Delta or its subcontractor in the Houston office and shipped to the DSTS laboratory in Austin. The laboratory will send you the sample results and a bill for the cost of analysis. If you have billing questions please contact DSHS at (512) 458-7317 directly. All radionuclide sampling will be analyzed and billed from DSHS laboratories. USAMR samples will be arrayzed and billed by LCRA. Lead and copper samples will be collected by your customers and should be shipped togranalysis for CRAyat (877) 362-5272 (toll free).

Monthly coliform monitoring in distribution will continue to be collected by your staff and shipped to an accredited lab of your staff and shipped to an accredited lab of your staff and shipped to an accredited lab of your staff and exponsition or failing to new for analyses will result in monitoring and exponsition of choice. Refusing sample collection or falling to pay for analyses will result in monitoring violations and revocation of reduced monitoring waivers.

If you have any questions about this letter or report, please contact the Drinking Water Quality Team by email with Subject: "Sample Cost Estimate Letter" at <pol>
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Sincerel y, Drinking Water Quality Team

Public Drinking Water Section, Water Supply Division

cc: TCEQ Region 12

PDW /MC 155

P. O. Box 13087

THIS IS NOT A BILL. DO NOT SEND PAYMENT TO TCEO.

MONITORING FREQUENCY STATUS

1012699		TE	XAS MOLECULAR
Sample Site:	001 Location: 0	ROUND STORAGE TAN	Kat plant: 2525 BATTLEGROUND RD
Test Type	Monitoring Type	Next Sample: Year Period	Comments MonChem = G: Dist = G
MIN	INITIAL/ROUTINE	2010 TRIENNIAL	
MTL	INITIAL/ROUTINE	2010 TRIENNIAL	1100 40
NO3	INITIAL/ROUTINE	2009 ANNUAL	NO3 <2
SOC5 VOC	INITIAL/ROUTINE INCREASED	2011 TRIENNIAL 2009 ANNUAL	PAST DETECTS
Sample Site:	Distribution		
Test Type	Monitoring Type	Next Sample: Year Period	Comments
COLIFORM	ROUTINE	2009 MONTHLY	1 SITE(S) REQUIRED BASED ON 50 POPULATION FROM LAST TOEQ INVESTIGATION
HAA5 LEAD/COPPE TTHM	REDUCED NEW INITIAL REDUCED	2009. TRIENNIAL 2010. ANNUAL - 2.R 2009. TRIENNIAL	CONTROL RM DW. COUNDS #SITES REQUIRED BASED ON POPULATION CONTROL RM DW

YEAR 2009 ESTIMATED CHEMICAL SAMPLING COSTS

1012699			TEXAS MOLECULAR	02-Feb-10
Entry Poir	it: 001 TEST TYPE	PERIOD	Sample Tap Location at Plant GRÖUND STORAGE TANK at plant: 2525 BATTLEGROUND RD	cost
0918644	NO3	ANNUAL	GROOMS STORAGE PAINT AND DATTEGROOMS RD	\$25.00
0918645	VOC	ANNUAL		\$183.00
Distribution	on.		•	
TCEQ ID	TEST TYPE	PERIOD	DISTRIBUTION LOCATION .	COST
	COLIFORM	MONTHLY	1 MONITORING PLAN SITE(S) TIMES EST. \$25 / SAMPLE	\$300.00
0918646	HAA5	(SUM)	CONTROL RM DW	\$230.00
0918647	TTHM	(SUM)	CONTROL RM DW	\$84:00.
	Lab fees ar	nd monitoring are	subject to change, this is only an estimate. TOTAL:	\$822.00

THIS IS NOT A BILL BODO NOT SEND PAYMENT TO LCEO!

Texas Commission on Environmental Quality. Water Quality Summary. Vopak Terminal Deer Park.

PWS#1010580. 3 pages.

Water Quality Summary -

VOPAK TERMINAL DEER PARK

PWS ID# 1010580

Region 12

HARRIS County



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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C.	<i>(</i>)	"	_

LAB ID EP427385	TCEQ	ID 0317199	Collected:	12/15/2004 JLE	Lab: T	Data Entry: EDR	12/27/2004
Chemical		μg/l	POE: 001	Well:			

Comments: SOC5

LAB ID AA56360	TCEQ ID 0819187		4/1/2008 EMI Lab: T Dat	ta Entry: EDR 4/14/2008	
Chemical	µg/l	POE: 001	Well:	• •	

LAB ID	TCEQ ID		Collected:	12/20/1995		Lab: X	Data Entry:		
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LAB ID	TCEQ ID		Collected:	12/17/1996		Lab: X	Data Entry:		
Chemical		µg/l	POE: 001	Well:			····		
	7050 P	·		44.04.007			 		44 554 555
LAB ID 9712504 Chemical	TCEQ ID		Collected:	11/3/1997		Lab: A	Data Entry:	KBE	11/26/1997
		µg/l	POE: 001	Well:					
1,1,1-TRICHLOROE TH	ANE	3.3	· ——————						
LAB ID 9715097	TCEQ ID		Collected:	12/29/1997		Lab: X	Data Entry:	RBE	1/7/1998
Chemical		µg/l	POE: 001	Well:					
METHYL T-BUTYL ETH	HER	2.0		•			٠,		
LAB ID 9808642	TCEQ ID		Collected:	6/17/1998		Lab: T	Data Entry:	RBE	7/17/1998
Chemical ·		µg/i	POE: 001	Well:					
			•						
LAB ID 9811945	TCEQ ID		Collected:	8/20/1998	DBR	Lab: T	Data Entry:	MRO	12/8/1998
Chemical		µg/l	POE: 001	Well:					
LAB ID 9911062	TCEQ ID		Collected	00011000	DRP	Lab: T	Data Entry:	EC A	11/2/1999
Chemical	ICEM E	µg/I	POE: 001	Well:	אטטוג	Lau.	Data Likiy.	IGA	11/2/1999
BROMODICHLOROME	T HANE	1.3		,					•
BROMOFORM		5.7							
DIBROMOCHLOROME	T HANE	4.7							
DICHLOROMETHAN E		0.5							
LAB ID EP002593	TCEQ ID		Collected:	2/15/2000	DBR	Lab: T	Data Entry:	FGA .	3/14/2000
Chemical		µg/i	POE: 001	Well:			•.		
BROMODICHLOROME	T HANE	1.5							
BROMOFORM		27				•			
CHLOROFORM		0.6	•						
DIBROMOCHLOROME	T HANE	3.6							
TOLUENE		2,9							

Tuesday, February 02, 2010
PWS # 1010580 Chemical Results - VOC

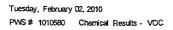


LAB ID EP007487	TCEQ ID		Collected:	5/22/2000	DBR	Lab: T	Data Entry:	FGA	6/16/2000
Chemical		µg/l	POE: 001	Well:				•	
BROMODICHLOROMET	HANE	1.2	•						
BROMOFORM		4.9					•		
DIBROMOCHLOROMET	HANE	4.3					• .		
LAB ID EP117833	TCEQ ID		Collected:	11/19/2001	JJA	Lab: T	Data Entry:	FGA	1/4/2002
Chemical		μg/l	POE: 001	Well:		•			
BROMODICHLOROMET	HANF	8,0	·····						
BROMOFORM		7.7	*						
DIBROMOCHLOROMET	HANE	3.5	• •	•					
FURFURAL		15	R-SA						
LAB ID EP218821	TCEQ ID		Collected:	12/4/2002	DBR	Lab: T	Data Entry:	1 FP	1/10/2003
Chemical	1014 15	μg/i	POE: 001	Well:			Data Lilayi		171012000
BROMOFORM		4.5							
DIBROMOCHLOROMET	LIANE	1.6							
METHYL T-BUTYL ETH		3.9							
LAB ID EP427532	TCEQ ID 03172		Collected:	12/15/2004	11 =	I abt 7	Data Entry:	EDD	1/21/2005
Chemical	1000 10 03172	µg/l	POE: 001	Well:	JLE	Cap: 1	DALA EIRIY:	EUK	112112005
	····		POE: 001	******	···		·	` -	
BROMOFORM		3.3							
DIBROMOCHLOROMET		2.2							
DICHLOROBROMOMET		0.6		٠.			•		
METHYL T-BUTYL ETH	ER (MIBE)	2.3	Comm	ents: VOC					
									
LAB ID EP522745	TCEQ ID 05167		Collected:		ŇΗ	Lab: T	Data Entry:	EDR	9/9/2005
Chemical		µg/l	POE: 001	Well:					
`				**					
			Comm	ents: VOC					
LAB ID AA00594	TCEQ ID 06173	68	Collected:	8/10/2006	MJA	Lab: T	Data Entry:	EDR	10/4/2006
Chemical		µg/l	POE: 001	Well:			_		
LAB ID AA00595	TCEQ.ID 06173	68	Collected:	8/10/2008	MIA	Lah: T	Data Entry:	FDR	10/4/2006
Chemical	OLG.ID	µg/l	POE: 001	Well:	10,00		Dum Limy.	LDIT	10/-1/2000
		2.9	101.001					·	
2-Furancarboxaldehyde		0.9	•						
Bromodichloromethane		6.6	•			•	•		
Bromoform Chloroform		1.1							
Dibromochioromet hane		3.1							•
Methyl-t-butyl ether (MTI	RF)	3.3							
Toluene	JL. /	0.5					•		
LAB ID AA43035	TCEQ ID 07187		Collected:	11/5/2007	nee	Lab. T	Data Entry:	EDP	3/4/2008
Chemical ·	INEM ID ALION	µg∕i	POE: 001	11/5/2007 Well:	אטע	Lau: I	Data CHUY:	EDK	31412000
Sicinical .		hA1	FUE: UUT						
LAB ID AA43036	TCEQ ID 07187		Collected:		DBR	Lab: T	Data Entry:	EDR	3/4/2008
Chemical	·	µg∕ī	POE: 001	Well:					
Bromodichloromethane		1.4							
Bromodichioromethane Bromoform	•	1.4 2.5							
						•			
Bromoform		2.5				•			·
Bromoform Chloroform	BE)	2.5 0.6						٠	

Tuesday, February 02, 2010
PWS # 1010580 Chemical Results - VOC



LAB ID 0804038004	TCEQ ID	0819188	Collected:	4/1/2008 EMI L	ab: └	Data Entry:	EDR	4/11/2008
Chemical		μg/ī	POE: 001	Well:			_	
Meth yi tert-but yi ether (N	ITBE)	1.16	FB					
LAB ID 0804038003	TCEQ ID	0819188	Collected:	4/1/2008 EMI L	ab: L	Data Entry:	EDR	4/11/2008
Chemical		µg/l	POE: 001	Well:		•		
Bromodichloromethane		3,13						
Bromoform		3.4			-			
Carbon Disulfide		0.68						
Chloroform		1.35						
Dibromochloromet hane		5.5						
Methyl tert-but yl ether (M	ffBE)	4.86					•	
LAB ID AA97103	TCEQ ID	0916722FB	Collected:	4/15/2009 SBI L	ab: T	Data Entry:	EDR	5/11/2009
Chemical		μg/I	POE: 001	Well:		•		
					•			
LAB ID AA97104	TCEO ID	0916722	Callantaria	4/15/2000 CDL 1	ah: T	Data Enter	EDD	EH 4 D000
	ICEU ID		Collected:	4/15/2009 SBI L. Well:	ao: i	Data Entry:	CUK	5/11/2009
Chemical		μg/I	POE: 001	weii.				
Bromodichloromethane		1.7						
Bromoform		2.9						
Chloroform		0.8						
Dibromochloromet hane		3.7 11						
Methyl-t-butyl ether (MTE								
LAB ID EP304979	TCEQ ID	_	Collected:	3/27/2003 DBR L		-		4/23/2003
Chemical		pg/l	POE: R	Well:	G11	010580B @	DEP00	1
ACETONE		13	S-QC; FIELD B	BLA				
LAB ID EP304980	TCEQ ID		Collected:	3/27/2003 DBR: L	ab: T	Data Entry:	GRE	4/23/2003
Chemical		µg/l	POE: R	Well:	G1	010580B @	DEP00	1
•								
LAB ID 0804038002	TCEQ ID	0891218	Collected:	4/1/2008 EMI L	ab: L	Data Entry:	EDR	4/11/2008
LAB ID 0804038002 Chemical	TCEQ ID	0891218 μg/l	Collected: POE: R	4/1/2008 EMI L Well: G10105808		Data Entry:	EDR	4/11/2008
Chemical		µg/l	POE: R			Data Entry:	EDR	4/11/2008
Chemical Methyl tert-but yl ether (M	ПВЕ)	μg/l 1.67	POE: R FB	Well: G10105808	B 			
Chemical Methyl tert-but yl ether (M LAB ID 0804038001	ПВЕ)	µg/l 1.67 0891218	POE: R FB Collected:	Well: G10105808	ab: L			4/11/2008 4/11/2008
Chemical Methyl tert-butyl ether (M LAB ID 0804038001 Chemical	ПВЕ)	μg/l 1.67 0891218 μg/l	POE: R FB	Well: G10105808	ab: L			
Chemical Methyl tert-butyl ether (M LAB ID 0804038001 Chemical Bromodichloromethane	ПВЕ)	ру/ 1.67 0891218 ру/ 2.55	POE: R FB Collected:	Well: G10105808	ab: L			
Chemical Methyl tert-butyl ether (M LAB ID 0804038001 Chemical Bromodichloromethane Bromoform	ПВЕ)	μg/l 1.67 0891218 μg/l 2.55 2.98	POE: R FB Collected:	Well: G10105808	ab: L			
Chemical Methyl tert-butyl ether (N LAB ID 0804038001 Chemical Bromodichloromethane Bromoform Carbon Disulfide	ПВЕ)	pg/l 1.67 0891218 pg/l 2.55 2.98 0.68	POE: R FB Collected:	Well: G10105808	ab: L			
Chemical Methyl tert-butyl ether (M LAB ID 0804038001 Chemical Bromodichloromethane Bromoform Carbon Disulfide Chloroform	ПВЕ)	pg/l 1.67 0891218 pg/l 2.55 2.98 0.68 1.07	POE: R FB Collected:	Well: G10105808	ab: L			
Chemical Methyl tert-butyl ether (M LAB ID 0804038001 Chemical Bromodichloromethane Bromoform Carbon Disulfide Chloroform Dibromochloromethane	TCEQ ID	pg/l 1.67 0891218 pg/l 2.55 2.98 0.68 1.07 4.75	POE: R FB Collected:	Well: G10105808	ab: L			
Chemical Methyl tert-but yl ether (M LAB ID 0804038001 Chemical Bromodichloromethane Bromoform Carbon Disulfide Chloroform Dibromochloromethane Methyl tert-but yl ether (M	TTBE) TCEQ ID	μg/l 1.67 0891218 μg/l 2.55 2.98 0.68 1.07 4.75 6.8	POE: R FB Collected: POE: R	Well: G1010580B 4/1/2008 EMI L Well: G1010580B	ab: L	Data Entry:	EDR	4/11/2008
Chemical Methyl tert-butyl ether (M LAB ID 0804038001 Chemical Bromodichloromethane Bromoform Carbon Disulfide Chloroform Dibromochloromethane Methyl tert-butyl ether (M LAB ID 0906923002	TTBE) TCEQ ID	μg/l 1.67 0891218 μg/l 2.55 2.98 0.68 1.07 4.75 6.8	POE: R FB Collected: POE: R Collected:	Well: G1010580B 4/1/2008 EMI L Well: G1010580B	ab: L	Data Entry:	EDR	
Chemical Methyl tert-but yl ether (M LAB ID 0804038001 Chemical Bromodichloromethane Bromoform Carbon Disulfide Chloroform Dibromochloromet hane Methyl tert-but yl ether (M LAB ID 0906923002 Chemical	TTBE) TCEQ ID	рул 1.67 0891218 рул 2.55 2.98 0.68 1.07 4.75 6.8 0994456FB рул	POE: R FB Collected: POE: R	Well: G1010580B 4/1/2008 EMI L Well: G1010580B	ab: L	Data Entry:	EDR	4/11/2008
Chemical Methyl tert-but yl ether (M LAB ID 0804038001 Chemical Bromodichloromethane Bromoform Carbon Disulfide Chloroform Dibromochloromethane Methyl tert-but yl ether (M LAB ID 0906923002 Chemical Acetone	TOEQ ID TOEQ ID TOEQ ID	рул 1.67 0891218 рул 2.55 2.98 0.68 1.07 4.75 6.8 0994456FB рул	POE: R FB Collected: POE: R Collected:	Well: G1010580B 4/1/2008 EMI L Well: G1010580B	ab: L	Data Entry:	EDR	4/11/2008
Chemical Methyl tert-but yl ether (M LAB ID 0804038001 Chemical Bromodichloromethane Bromoform Carbon Disulfide Chloroform Dibromochloromethane Methyl tert-but yl ether (M LAB ID 0906923002 Chemical Acetone Methyl tert-but yl ether (M	TOEQ ID TOEQ ID TOEQ ID	рул 1.67 0891218 рул 2.55 2.98 0.68 1.07 4.75 6.8 0994456FB рул 6.57 0.95	POE: R FB Collected: POE: R Collected:	Well: G1010580B 4/1/2008 EMI L Well: G1010580B	ab: L	Data Entry:	EDR	4/11/2008
Chemical Methyl tert-butyl ether (M LAB ID 0804038001 Chemical Bromodichloromethane Bromoform Carbon Disulfide Chloroform Dibromochloromethane Methyl tert-butyl ether (M LAB ID 0906923002 Chemical Acetone Methyl tert-butyl ether (M LAB ID 0906923001	TOEQ ID TOEQ ID TOEQ ID	рул 1.67 0891218 рул 2.55 2.98 0.68 1.07 4.75 6.8 0994456FB рул	POE: R FB Collected: POE: R Collected:	Well: G1010580B 4/1/2008 EMI L Well: G1010580B 6/19/2009 SBI L Well: G1010580B	ab: L	Data Entry: Data Entry:	EDR	4/11/2008
Chemical Methyl tert-but yl ether (M LAB ID 0804038001 Chemical Bromodichloromethane Bromoform Carbon Disulfide Chloroform Dibromochloromethane Methyl tert-but yl ether (M LAB ID 0906923002 Chemical Acetone Methyl tert-but yl ether (M	TOEQ ID TOEQ ID TOEQ ID	рул 1.67 0891218 рул 2.55 2.98 0.68 1.07 4.75 6.8 0994456FB рул 6.57 0.95	POE: R FB Collected: POE: R Collected: POE: R	Well: G1010580B 4/1/2008 EMI L Well: G1010580B 6/19/2009 SBI L Well: G1010580B	ab: L	Data Entry: Data Entry:	EDR	4/11/2008 6/30/2009
Chemical Methyl tert-butyl ether (M LAB ID 0804038001 Chemical Bromodichloromethane Bromoform Carbon Disulfide Chloroform Dibromochloromethane Methyl tert-butyl ether (M LAB ID 0906923002 Chemical Acetone Methyl tert-butyl ether (M LAB ID 0906923001	TOEQ ID TOEQ ID TOEQ ID	рул 1.67 0891218 рул 2.55 2.98 0.68 1.07 4.75 6.8 0994456FB рул 6.57 0.95	POE: R FB Collected: POE: R Collected: POE: R Collected:	Well: G1010580B 4/1/2008 EMI L Well: G1010580B 6/19/2009 SBI L Well: G1010580B	ab: L	Data Entry: Data Entry:	EDR	4/11/2008 6/30/2009
Chemical Methyl tert-but yl ether (M LAB ID 0804038001 Chemical Bromodichloromethane Bromoform Carbon Disulfide Chloroform Dibromochloromethane Methyl tert-but yl ether (M LAB ID 0906923002 Chemical Acetone Methyl tert-but yl ether (M LAB ID 0906923001 Chemical	TOEQ ID TOEQ ID TOEQ ID	рул 1.67 0891218 рул 2.55 2.98 0.68 1.07 4.75 6.8 0994456FB рул 6.57 0.95	POE: R FB Collected: POE: R Collected: POE: R Collected:	Well: G1010580B 4/1/2008 EMI L Well: G1010580B 6/19/2009 SBI L Well: G1010580B	ab: L	Data Entry: Data Entry:	EDR	4/11/2008 6/30/2009
Chemical Methyl tert-butyl ether (M LAB ID 0804038001 Chemical Bromodichloromethane Bromoform Carbon Disulfide Chloroform Dibromochloromethane Methyl tert-butyl ether (M LAB ID 0906923002 Chemical Acetone Methyl tert-butyl ether (M LAB ID 0906923001 Chemical Acetone Acetone Acetone	TTGEQ ID TTGEQ ID TTGEQ ID TTGEQ ID	рул 1.67 0891218 рул 2.55 2.98 0.68 1.07 4.75 6.8 0994456FB рул 6.57 0.95	POE: R FB Collected: POE: R Collected: POE: R Collected:	Well: G1010580B 4/1/2008 EMI L Well: G1010580B 6/19/2009 SBI L Well: G1010580B	ab: L	Data Entry: Data Entry:	EDR	4/11/2008 6/30/2009
Chemical Methyl tert-butyl ether (M LAB ID 0804038001 Chemical Bromodichloromethane Bromoform Carbon Disulfide Chloroform Dibromochloromethane Methyl tert-butyl ether (M LAB ID 0906923002 Chemical Acetone Methyl tert-butyl ether (M LAB ID 0906923001 Chemical Acetone Carbon Disulfide	TTBE) TCEQ ID TCEQ ID TCEQ ID TCEQ ID	рул 1.67 0891218 рул 2.55 2.98 0.68 1.07 4.75 6.8 0994456FB рул 0.95 0994456 рул 6.57 0.95	POE: R FB Collected: POE: R Collected: POE: R Collected:	Well: G1010580B 4/1/2008 EMI L Well: G1010580B 6/19/2009 SBI L Well: G1010580B	ab: L	Data Entry: Data Entry: Data Entry:	EDR EDR	4/11/2008 6/30/2009 6/30/2009





Texas Commission on Environmental Quality. Document addressed to Pieter Bakker. Subject: Vopak Terminal Deer Park. Chemical Sampling Schedule and Cost Estimate, and Monitoring Frequency Status Report.

January 20, 2009. 2 pages.

H. S. Buddy Garcia, Chairman Larry R. Soward, Commissioner Bryan W. Shaw, Ph.D., Commissioner Mark R. Vickery, P.G., Executive Director



RN100225093

Texas Commission on Environmental Quality

Protecting Texas by Reducing and Preventing Pollution

January 20, 2009

PIETER BAKKER, PRESIDENT (RESPONSIBLE OFFICIAL) VOPAK NORTH AMERICA INC (LEGAL ENTITY) 2000 WEST LOOP S STE 2200 HOUSTON, TX 77027-3511

SUBJECT: Public Drinking Water System - VOPAK TERMINAL DEER PARK

Year 2009 Chemical Sampling Schedule and Cost ESTIMATE, and Monitoring Frequency Status Report

(THIS IS NOT A BILL)

Dear Water System Official:

Enclosed are reports of sampling requirements and sample collection, schedules for estimate of analysis costs during calendar year 2009.

* The first report, titled "Monitoring Frequency Status" describes all of your system's carrent chemical monitoring required by the Texas Administrative Code (IAC) Chapter 30 Subchapter F. The second report, titled "Year 2009 Estimated Chemical Sampling Costs," lists the type and approximate analysis cost for each sample currently scheduled for 2009. This is only an estimate. DO NOT SEND PAYMENT TO TCEQ.

The "Explanation for CHEMICAL SAMPLE COST ESTIMATE AND MONITORING FREQUENCY STATUS REPORTS" is also enclosed and available online at <www.tceq.sta.te.tx.us/goto/pws/sampling/key>

REPORTS" is also enclosed and available online at <www.tceq.state.tx.us/goto/pws/sampling/key>.

* TCEQ collects, cremical samples through a sampling contractor. Delta Consultants. (Delta) at (512) 990-7467, (800) 477-7411 for http://www.deltaenv.com. A Delta representative will contact you to schedule a sampling appointment. Awater system official must accompany the sampler during collection.

* You should attack acopy of this letter and reports to your Monitoring. Plan for reference.

You must keep chemical records for the years and update your contact information.

You must be prepared to make these vectors available to the general public and TCEQ upon request. If your system has a change in ownership, responsible official address phone number etc., you must inform the TCEQ in writing. This information can be viewed using the Integrated Water Utilities Database (WUD) on the internet at state ty us five units. If any information in MLD is proprect for your system please notify us by email at: <http://www10.tceq.state.tx.us/iwud/>. If any information in iWUD is Incorrect for your system, please notify us by email at: <pdvs@tceq.state .tx.us>, or by mail at the letterhead address.

You must maintain an up-to-date monitoring plan that lists sample sites and indicates them on a map.

Your system's operator must have the Monitoring plan that lists sample sites and indicates them on a map.

Your system's operator must have the Monitoring Plan available for the Delta sample collector at each sampling event.

Failure to do so is a violation. On the web search "Monitoring Plan" from TCEO's home page for more information.

Your chemical compliance samples (except toglead and copper samples) are collected by Delta or its subcontractor in the Houston office and shipped to the DSIS laboratory in Austin Title laboratory will send you the sample results and a bill for the cost of analysis. If you have billing questions please contact DSHS at (512) 458-7317 directly. All radionuclide sampling will be analyzed and billed from DSHS laboratories. UCMR samples will be analyzed and billed by LCRA. Lead and copper samples will be collected by your faistomers fand should be shipped for an advised to the content of the collection of called the provided by your staff and shipped to an accredited lab of your choice. Befusing sample collection of failing to pay for analyses will be result in monitoring violations, and revication of choice. Refusing sample collection or failing to pay for analyses will result in monitoring violations and revocation of reduced monitoring waivers.

If you have any questions about this letter or report, please contact the Drinking Water Quality Team by email with Subject: "Sample Cost Estimate Letter" at <pol>
cost estimate
Letter" at <pol>
cost ate.tx.us
or at (512) 239-4691.

Drinking Water Quality Team

Public Drinking Water Section, Water Supply Division

cc: TCEQ Region 12

Austin. Texas 78711-3087

Internet address: www.tceq.state.tx. us

MONITORING FREQUENCY STATUS

			····
	VOPAK TE	RMINAL DEER PAR	K_
001 Location:	0.024 MG GST at plant: Plant		
Monitoring Type	Next Sample: Year Period	Comments	MonChem = G: 'Dist = G
INITIAL/ROUTINE	2010 TRIENNIAL		•
INITIAL/ROUTINE	2009 TRIENNIAL		
INITIAL/ROUTINE	2009 ANNUAL	NO3 <2	
REDUCED	2014 6 YEAR	NO DETECTS	
INCREASED	2009 ANNUAL	PAST DETECTS	
Distribution			
Monitoring Type	Next Sample: Year Period	Comments	
ROUTINE	2009 MONTHLY	1 SITE(S) REQUIRED I TCEQ INVESTIGATION	BASED ON 180 POPULATION FROM LAST
REDUCED	2010 TRIENNIAL	2759 BATTLEGROUND	RD .
REDUCED WAIVER	2009 NINE YEAR	#SITES REQUIRED BA	ASED ON POPULATION
REDUCED	2010 TRIENNIAL	2759 BATTLEGROUND	RD
	Monitoring Type INITIAL/ROUTINE INITIAL/ROUTINE INITIAL/ROUTINE REDUCED INCREASED Distribution Monitoring Type ROUTINE REDUCED REDUCED REDUCED WAIVER	VOPAK TE	Next Sample:

YEAR 2009 ESTIMATED CHEMICAL SAMPLING COSTS

10105	80	VOPAK TERMINAL DEER PARK				
Entry Poi	nt; 001		Sample Tap Location at Plant			
TCEQ ID	TEST TYPE	PERIOD	0.024 MG GST at plant: Plant	•	COST	
0916720	ALLMETAL	TRIENNIAL			\$264.00	
0916721	NO3	ANNUAL		Terres de la composition della	\$25.00	
0916722	VOC	ANNUAL			\$183.00	
Distributio	on					
TCEQ ID	TEST TYPE	PERIOD	DISTRIBUTION LOCATION		COST	
	COLIFORM	MONTHLY	Y MONITORING PLAN SITE(S) TIMES EST: \$25)	SAMPLE I I I I	1 00.000 ≾ 3 3 3 1	
	PB/CU	NINE YEAR	GUARD GATE BATHROOM SINK		.\$30,00	
	PB/CU	NINE YEAR	MARINE OPERATIONS-UPSTA IRS SIN		ak (#1. /\$ 30.00	
	PB/CU	NINE YEAR	PAKTANK CHANGE HOUSE-COUNTER S		\$30.00	
	PB/CU	NINE YEAR	PAKTANK OFFICE-KITCHEN SINK		\$30.00	
	PB/CU	NINE YEAR	SAFETY OFFICE-SINK	oyeenhaali a kaalaraa kaalaa aanakka #3	\$30.00	
	Ish fees ar	nd monitoring are	subject to change, this is only an estimate.	TOTAL:	\$922.00	

THIS IS NOT A BILL. DO NOT SEND PAYMENT TO TOEQ.

Vopak Terminal Deer Park. Accessed April 7, 2011.

http://www.vopak.com/business segments/storage/142

page terminalSpecific.php?terminal=Vopak+Terminal

+Deer+Park







Home » Our Activities » Worldwide Terminal List







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About Vopak

Our Activities

Worldwide Terminal List

Liquified Natural Gas (LNG)

Complementary Services

Press Center

Sustainability

Working at Vopak

Corporate Governance

Download Area

Contact

Vopak Terminal Deer Park



Capacity			
1,115,100	cbm		

Tanks

242

Tank Types

Mild steel, Coated steel, Stainless

steel,Sphere Tank range from-to

159-12,719 cbm

Access

Barge

Rail

Pipeline

Draught

For vessels: 3

For barges: 14

Petroieum products

Chemicals

Services

Heating

Nitrogen blanketing Other Services

Water vessel to vessel transfer across

Direct move tank car or tank truck to

Steam heat capabilities

Tank Car purging and cleaning

24 Hour tank car switching

EDI billing

Automatic Truck Rack

Type terminal

Import/Export/Distribution, Hub

Vopak North America

Vopak: 100.00%

Vopak Terminal Deer Park

2759 Independence Parkway South

Deer Park, Texas 77536

Phone: +1 281 604 6000

Fax: +1 281 604 6100

Website: www.vopakamericas.com

Commercial contact



Phone: +1 281 604 6015 E-mail: Jeff Dewar

Terminals in USA

Vopak Terminal Deer Park

Vopak Terminal Galena Park (

Vopak Terminal Long Beach 🗿

Vopak Terminal Los Angeies 🔞

Vopak Terminal North

Wilmington

Vopak Terminal Savannah

Vopak Terminal South

Wilmington

Terminals in North America

Terminals worldwide

barrels | cubic metres (cbm)

"We aim to achieve excellence in everything that we do."







Texas Commission on Environmental Quality.

Consolidated Compliance and Enforcement Data

System. Texas Molecular Incident Detail. #85698. 3

pages.

CCEDS Incident	Detail			
			Received Date	01/05/2007
- Tracking Nu	mber : 85698	Status CLOSED _	Status Date	01/85/2007
	OMPLAINT		Number Complainin	ng (0
7.79	Menganovalesnovse	<u> </u>		
Start	@% Date 81/05/2007	Time 09:80 F. Justines	Date	Time [88:88
AND THE PROPERTY OF THE PROPER	Belging Special Conference (C.) Company of the Conference (C.) Company of the Conference (C.) Conference (C.) Conference (C.)	A confidence of the control of the c		
Frequency	PAST	Duration ESTIMATED		
Effect	FINANCIAL GENERAL	Refer or Do Not	Respond	
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	Description	Action Taken	Com	ments
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Reference 20

Texas Commission on Environmental Quality.

Consolidated Compliance and Enforcement Data

System. Texas Molecular Incident Detail. #93755. 3

pages.

CODS Incident	Detail :						
					Received D	ate 07/09/2007	
Tracking Nun	nber 93755		Status	CLOSED	Status Date	07/09/2007	
	IMPLAINT	Saulis Bergera			Number Comp	laining - 🗓	
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	and the second s				and the state of t		All parties are to the second of the second

CAUSE IS A MISSED VALVE ALIGNMENT... IMPACT IS LAND.

Prev Next Save Cancel Print

RESPONSE IS HAVE NOTIFIED HARRIS COUNTY POLLUTION CONTROL. CLEAN UP IN PROCESS. NO INJURIES / EXPOSURES. THIS IS NOT AN EMERGENCY, NO CALL BACK IS REQUIRED. HASTINGS INCIDENT NUMBER 1929.

Reference 21

Texas Commission on Environmental Quality.

Consolidated Compliance and Enforcement Data

System. Texas Molecular Incident Detail. #104835. 3

pages.

CEDS Incident	Vetali			Received Date	03/12/2008
. Tracking Nur	mber 104835	Status	CLOSED	Status Date	93/12/2008
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Start	Ďate 03/11/2008	Time 23:09	End	Date ∫	Time 88:88
Frequency	JPAST	Duration	ESTIMATED		
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Notification	Type INITIAL PEP	ORT _		Significant Incident	NO THE PROPERTY OF THE PROPERT
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RESPONSE IS THE IN HOUSE FIRE DEPARTMENT US SPRAYING THE AREA DOWN WITH FOAM. TANCO IS EN ROUTE WITH VACUUM TRUCKS TO PERFORM THE CLEAN UP. CALLER CONSIDER THIS AN EMERGENCY. HASTINGS INCIDENT # 3494.

Reference 22

Texas Commission on Environmental Quality.

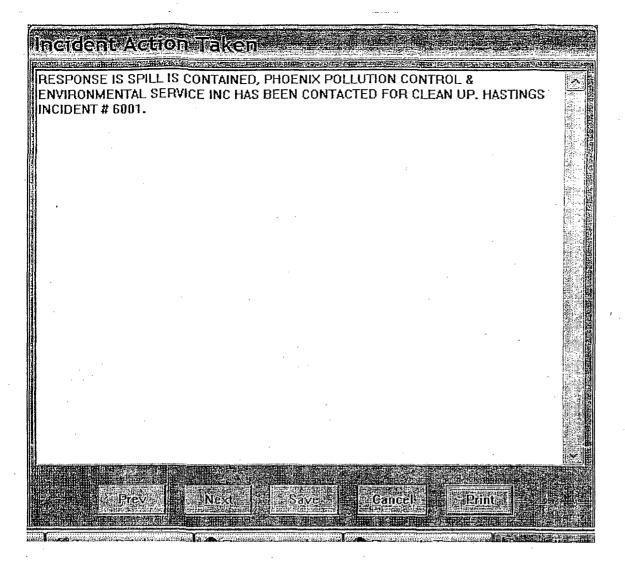
Consolidated Compliance and Enforcement Data

System. Texas Molecular Incident Detail. #121371. 5

pages.

CCEDS Incident Detail					
			Received Date	03/13/2 009	
Tracking Number 121371	Status (CLOSED	Status Date	11/03/2009	
Type COMPLAINT		ere ne eu ép, saut 7 La Siria La Péril Cele	Number Complair	ning a	
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Incident Descr	PECON				
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Investigation Comment

On March 13, 2009, Vopak Terminal located at 2579 Battleground Road, Deer Park, experienced a spill of methyl tertiary butyl ether (MTBE). Approximately, 130,000 gallons of MTBE was released from a vent on top of Tank 405 due to overfilling. National Response Center was notified and incident report number 20090809 was created.

The tank is located in a tank field on the southeastern side of the facility. The tank farm is outfitted with a concrete wall surrounding eight - 80,000 barrel tanks. Upon realizing the spill, the pumps feeding the tank were turned off and the facility spill response contractor was activated. Phoenix Pollution Control and Environmental Services arrived shortly after the spill was discovered and began removing the free standing MTBE. The product was pumped into Vopak's permitted waste treatment system. Contaminated soil was excavated with front end loaders and shovels and placed in roll off boxes, covered with tarps until they could be properly characterized. They were then transported off site to Gulfwest Landfill. After 30 days of excavating, 269 tons of soil had been removed.

On September 17, 2009, Eclipse Environmental Engineering, Inc. collected three final verification samples in the main body of the spill area.

On October 20, 2009, Karen Puente visited Vopak Terminal to verify clean up was complete. At this time, no final report had been received by the region. Ms. Tiffany Hill met Ms. Puente and accompanied her to the spill site. It was observed that soil had been removed and there was no sign of any product being present on the ground. Ms. Hill said new soil was going to be backfilled as soon as the results came back clean. When the results came back, they were non-detect for two of the samples and 0.0142

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Investigation Comment

the spill, the pumps feeding the tank were turned off and the facility spill response contractor was activated. Phoenix Pollution Control and Environmental Services arrived shortly after the spill was discovered and began removing the free standing MTBE. The product was pumped into Vopak's permitted waste treatment system. Contaminated soil was excavated with front end loaders and shovels and placed in roll off boxes, covered with tarps until they could be properly characterized. They were then transported off site to Gulfwest Landfill. After 30 days of excavating, 269 tons of soil had been removed.

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The final report was received by TCEQ Region 12 office on October 30, 2009. This information indicates that no significant impacts to the environment or waters of the State were recorded and clean up efforts were determined satisfactory. No further action is required at this time.

Documents	
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Reference 23

Texas Commission on Environmental Quality.
Consolidated Compliance and Enforcement Data
System. Texas Molecular Incident Detail. #148066.3
pages.

CCEDS Incident Detail		
	Received Date 12/03/2010	
Tracking Number 148066	Status OPEN Status Date 12/03/2010	
Type COMPLAINT	Number Complaining 0	
oup Start- de les deserves en les deserves		
Date 12/02/2010	Time 00:00 Viknown? Date Time	89:00
Frequency CURRENT	Duration ESTIMATED -	
Elfect FINANCIAL GENERAL	Priority Within 30 Calendar Days	-1-
Nature INDUSTRIAL	River-Segment 0000 Misreporte	ed?
Notification Type INITIAL REPORT	▼ Significant Incident NO ▼	
Regulated Entity		
VOPAKTERMINAL DEER PARK		Transmission of economics
Receiving Water Body		A Company of the Comp
NA NA		
Assigned To Staff Member		
Alast Name RODRIGUEZ	First Name WALTER AKA	
Description	Action Taken こう こう Comments こう	
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A leak in the ABS storage tank was discovered on the 2nd of December 2010 at the Vopac Terminal in Deer Park, Texas on Independence Hwy.

The Tank will be taken out of service and the tank floor assessed and the contaminated soil removed. Prev. Next. Save Gancel Print

Reference 24

Environmental Protection Agency. Envirofacts Report. Vopak Logistics Services USA Inc. Deer Park. Accessed April January 13, 2010. 81 pages. Available:

http://oaspub.epa.gov/enviro/tris_control.tris_print?tris_id=775 36MPKNC2759B



Toxics Release Inventory (TRI)

You are here: EPA Home Envirofacts TRI Envirofacts Report

http://ozspub.epa.gov/enviro/tris_control.tris_print?tris_ld=77536MPKNC2759B Last updated on Wednesday, January 13th, 2010.



Envirofacts Report

Query executed on JAN-13-2010 Results are based on data extracted on SEP-18-2009

Click on "View Facility Information" to view EPA Facility information for the facility.

Facility Name: Address:

VOPAK LOGISTICS SERVICES USA INC Mailing Name: DEER PARK

Mailing Address:

VOPAK LOGISTICS SERVICES USA INC

PO BOX 897

2759 BATTLEGROUND RD DEER PARK TX 775360897 HARRIS

Region:

DEER PARK TX 775360897 77536MPKNC2759B

DUNS

859283962 Number:

County:

Facility Information: View Facility Information

TONY BUNDICK

VOPAK NA INC

TRI ID: FRS_ID

110000757752

TRI Preferred Latitude: Public Contact:

Parent Company:

TRI Preferred Longitude:

2816046171

Phone: Parent DUNS:

026643007

Starting with Reporting Year 2006, TRI Facilities began reporting NAICS codes, instead of SIC codes, to identify their Primary Business Activities.

NAICS Codes for 2008

NAICS CODE PRIMARY NAICS DESCRIPTION 562211 YES Hazardous Waste Treatment and Disposal

The above information comes from 2008, which was the last year NAICS code data was reported for this facility. The earliest NAICS code data on file for this facility was reported in 1998.

http://oaspub.epa.gov/enviro/tris_control.tris_print?tris_id=77536MPKNC2759B

1/13/2010

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Map this facility ...

Map this facility using one of Envirofact's mapping utilities.

Besides TRI, this facility also does the following:

- has reported air releases under the Clean Air Act
 has permits to discharge to water

More information about these additional regulatory aspects of this facility can be found by pressing the other regulatory data button below.

Other Regulatory Data

Total Aggregate Releases of TRI Chemicals to the Environment

For all releases estimated as a range, the mid-point of the range was used in these calculations. This table summarizes the releases reported by the facility. NR - signifies nothing reported by this facility for the corresponding medium.

Total Aggregate Releases of TRI Chemicals excluding Dioxin and Dioxin-like Compounds (Measured in Pounds)

Media	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
Air Emissions	3070	3570	7439	3694	8234.28	63105.8	18528.2	605	780	1613	2810
Surface Water Discharges	1471.85	1479.85	27741.08	143995.9	170912.7	221468.3	297823.95	13815	25641	39482	4279
Releases to Land	NR	NR	22519	144823	1047	NR	NR	NR	NR	NR	NR
Underground Injection	.9894	43429.0171	2563789	6638455	4892181	7122878	3793925	15560	17959	11980	99164
Total On-Site Releases	4542.8394	48478.8671	2621488.08	6930967.9	5072374.98	7407452.1	4110277.15	30980	44380	53075	106253
Transfer Off-Site to Disposal	NR	NR	21460.4	918120	397712.64	253751.92	138779.72	187350	66474	198514	50770
Total Releases	4542.8394	48478.8671	2642948.48	7849087.9	5470087.62	7661204.02	4249056.87	218330	110854	251589	157023

Graphic Summary of this Table

Total Aggregate Releases of Dioxin and Dioxin-like Compounds

(Measured in Grams)

Media	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
Air Emissions	NR	NR	NR	NR	ŅR	NR	NR	. NR	NR	NR	NR
Surface Water Discharges	NR										
Releases to Land	NR										
Underground Injection	NR	: NR	NR	. NR							
Total On-Site Releases	NR										
Transfer Off-Site to Disposal	NR										
Total Releases	NR	NR	NR	. NR	. NR	NR	NR	NR	NR	NR	NR

Graphic Summary of this Table

TRI Chemicals Reported on Form A:

The facility has certified that for each chemical listed below, the annual release did not exceed 500 pounds for the reporting year listed and the listed chemical was not manufactured, processed, or otherwise used in an amount exceeding 1 million pounds in the reporting year. Form A can not be filed for PBT chemicals (except certain instances of reporting lead in stainless steel, brass, or bronze alloys).

Chemical Name	IRI Chemical ID	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
1.3-BUTADIENE	000106990	Not Reported	Not Reported							Not Reported	Not Reported	Reported
2.4- DIAMINOANISOLE			Not Reported					Not Reported		Not Reported		Not Reported
2- ETHOXYETHANOL	000110805	Not Reported	Not Reported	Not Reported	Not Reported			Not Reported		Not Reported		Not Reported
ACRYLIC ACID	1 (3) (1) (1) (1)	H		Not Reported				Not Reported		Not Reported		Not Reported
AMETRYN	000834128			Not Reported			Not Reported	Not Reported		Not Reported		Not Reported
AMMONIA		Not . Reported	1	Not Reported		Not Reported		Not Reported		Not Reported		Not Reported
CHLORINE	007782505	Not Reported				Not Reported			Not Reported	Not Reported	Not Reported	Reported
						li .		1				

http://oaspub.epa.gov/enviro/tris_control.tris_print?tris_id=77536MPKNC2759B

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CHROMIUM	007440473	Not Reported				Not Reported		Not Reported			Not Reported	Not Reported
COPPER		Not Reported	Not Reported	Not	Not	Not Reported	Not Reported	Not Reported	Reported	Not Reported	Not Reported	Not Reported
CREOSOTE		Not Reported	Not Reported		Not Reported	Not Reported	Not Reported	Not Reported	Reported	Not Reported	Not Reported	Not Reported
DIAZINON		Not Reported		Not Reported	Not Reported	Not Reported		Not Reported	Reported	Not Reported	,	Not Reported
DIETHANOLAMINE		Not Reported		Not Reported	Not Reported	Not Reported						
ETHYLENE GLYCOL	000107211	Not Reported		Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	Reported	Not Reported	Not Reported	Not Reported
HYDROGEN FLUORIDE	1 DULY PERMITTER	Not Reported	Not Reported	Not Reported	Not Reported		Not Reported	Not Reported			Not Reported	Not Reported
METHAM SODIUM	H UMM1 37428.	Not Reported		Not Reported	Not Reported	Not Reported	Not Reported	Not Reported	IIKEDONTEG	Not Reported		Not Reported
NICKEL	007440020	Not Reported	Not Reported	Not Reported	Not Reported	Not Réported	Not Reported	Not Reported	Reported	Not Reported	Not Reported	Not Reported
PHENOL	000108952	Not Reported	Reported	Not Reported	Not Reported	Not Reported						
PHTHALIC ANHYDRIDE	000085449	Not Reported	Reported	Not Reported	Not Reported	Not Reported						
PROPYLENE	000115071	Not Reported	Reported									
PYRIOINE	000110861	Not Reported	Reported	Not Reported	Not Reported	Not Reported						
SODJUM NITRITE	007632000	Not Reported		Not Reported	,	Not Reported						

NOTE:
All chemicals reported below have release or transfer amounts greater than zero. To see a list of all chemicals reported by this facility click here.

Names and Amounts of Chemicals Released to the Environment by Year,

For all releases estimated as a range, the mid-point of the range was used in these calculations. NR - signifies nothing reported for this facility by the corresponding medium. Rows with all "O" or "NR" values were not listed.

Chemical Name	Media	Unit Of Measure	2008	2007	2006	2005	2004,	2003	2002	2001	2000	1999	1998
1.2.4-TRICHLOROBENZENE (TRI Chemical ID: 000120821)	AIR FUG	Pounds	NR	NR	5	NR	. NR	NR	NR	NR	NR	NR	NR
1.2.4-TRICHLOROBENZENE (TRI Chemical ID: 000120821)	AIR STACK	Pounds	NR	NR	250	NR	NR	NR	NR	NR	NR	NR	NR
1.2.4-TRICHLOROBENZENE (TRI Chemical ID: 000120821)	ו נמזמט	Pounds	NR	NR	14284	NR.	NR	NR	NR	NR	NR	NR	NR
1.2.4-TRIMETHYLBENZENE (TRI Chemical ID: 000095636)	AIR FUG	Pounds	NR	NR	NR	NR	NR	0	101	NR	NR	NR	NR
1.2.4-TRIMETHYLBENZENE (TRI Chemical ID: 000095636)	AIR STACK	Pounds	NR	NR	NR	NR	NR	872.8	267.8	NR	NR	NR	NR
1.2.4-TRIMETHYLBENZENE (TRI Chemical ID: 000095636)	ז נאזאח	Pounds	NR ·	NR	NR	NR	NR	31801	15383	ŅR	NR	NR	NR
1.2.4-TRIMETHYLBENZENE (TRI Chemical ID: 000095636)	WATER	Pounds	NR	NR	NR	NR	NR	48	649.15	NR	NR	NR	NR
1.2-BUTYLENE OXIDE (TRI Chemical ID: 000105887)	AIR FUG	Pounds .	NR	NR	NR	NR	NR	NR	NR	5	- NR	NR	NR
1.2-DIBROMOETHANE (TRI Chemical ID: 000106934)	I CNINU	Pounds	NR	NR	NR	NR	NR	34508	25127	NR	NR	NR	NR
1.2-DIBROMOETHANE (TRI Chemical ID: D00106934)	WATER	Pounds	NR	NR	NR	NR.	NR	121.25	11.3	NR	NR	NR	NR
1.2-DICHLOROBENZENE (TRI Chemical ID: 000095501)	AIR FUG	Pounds	NR	NR	5.	NR.	NR	NR	NR	NR :	NR	NR	NR
1.2-DICHLOROBENZENE (TRI Chemical ID: 000095501)	AIR STACK	Pounds	NR	NR	250	NR	NR	. NR	NR	NR	NR	NR	NR
1.2-DICHLOROBENZENE (TRI Chemical ID:	I (MINU	Pounds	NR	NR	29668	NR	NR	NR	NR	NR	NR	NR	NR

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000095501)							L						
1,2-DICHLOROETHANE (TRI Chemical ID: 000107062)	AIR FUG	Pounds	NR	NR	NR	0	o	0	85.2	NR	NR	NR	NR
1.7-DICHLOROETHANE (TRÏ Chemical ID: 000107062)	AIR STACK	Pounds	NR	NR	NR	0	. 0	130.8	18.8	NR	NR	NR	NR
1,2-DICHLOROETHANE (TRI Chemical ID: 000107062)	UNIN) I	Pounds	NR	NR	NR	66119	98916	111845	25154	ŅR	NR	NR.	NR
1.2-DICHLOROETHANE (TRI Chemical ID: 000107062)	WATER	Pounds	NR.	NR	NR	0	1.4	23.85	493.95	NR	NR	NR	NR
1.3-DICHLOROBENZENE (TRI Chemical ID: 000541731)	AIR FUG	Pounds	NR	NR	5	NR.	NR	NR	NR	. NR	NR	NR	NR
1.3-DICHLOROBENZENE (TRI Chemical ID: 000541731)	AIR STACK	Pounds	NR	NR	250	NR	NR	NR	NR	NR	NR	NR	NR
1.3-DICHLOROBENZENE (TRI Chemical ID: 000541731)	TOTION	Pounds	NR	NR	26372	NR	NR	NR.	NR	NR	NR	NR	NR
1.4-DICHLOROBENZENE (TRI Chemical ID: 000106467)	AIR FUG	Pounds	NR	NR	5	NR.	NR	NR	NR	· NR	NR	. NR	NR
1.4-DICHLOROBENZENE (TRI Chemical ID: 000106467)	AIR STACK	Pounds	NR	NR	250	NR	NR	NR	NR	NR	NR	NR	NR.
1.4-DICHLOROBENZENE (TRI Chemical ID: 000106467)	UNINI I	Pounds	NR	NR.	17071	NR	NR	NR	NR	NR	5	NR	NR
1.4-DICHLOROBENZENE (TRI Chemical ID: 000106457)	WATER	Pounds	NR	NR	250	NR	NR	NR	NR	NR	NR	NR	NR
1.4-DIOXANE (TRI Chemical ID: 000123911)	AIR FUG	Pounds	NR	NR	.5	5	NR.	NR	NR	5	NR	. NR	NR
<u>1.4-DIOXANE</u> (TRI Chemical ID: 000123911)	AIR STACK	Pounds	NR	NR	250	NR	NR	NR	NR	NR	NR.	NR	NR
H	E .	N .	li .	ė;	år	3	11	Ii		iii	33	34	a ii

1,4-DIOXANE (TRI Chemical ID: 000123911)	I [NINU	Pounds	NR	NR	141288	105826	NR	NR	NR	NR	NR	 NR	NR
1.4-DIOXANE (TRI Chemical ID: 000123911)	WATER	Pounds	NR	NR	148.95	NR	NR	NR	NR	NR	NR.	NR	NR
2.4-D 2-ETHYL-4- METHYLPENTYL ESTER (TRI Chemical ID: 053404378)	UNINI I	Pounds	NR	NR	NR	NR	NR	NR	2 9512	, NR	NR	·· NR	NR
2-ETHOXYETHANOL (TRI Chemical ID: 000110805)	AIR EUG	Pounds	NR	NR	NR	5	0	NR	NR	NR	NR	·NR	0
2-ETHOXYETHANOL (TRI Chemical ID: 000110805)	AIR STACK	Pounds	NR	NR	NR	5	0	NR	NR.	NR	NR	NR	0
2-ETHOXYETHANOL (TRI Chemical ID: 000110805)	I (NINU	Pounds	NR	NR	NR	300	100800	73652	NR.	NR	NR	NR	0
2-ETHOXYETHANOL (TRI Chemical ID: 000110805)	WATER	Pounds	. NR	NR	NR	479.8	1801	1930.2	5891.35	NR	250	NR	NR
2-METHOXYETHANOL (TRI Chemical ID: 000109864)	LCNINU	Pounds	NR	ŅŖ	NŘ.	NR	NR	40740	25352	NR	NR	NR	NR
2-METHOXYETHANOL (TRI Chemical ID: 000109864)	WATER	Pounds	NR	NR	NR	NR	N R	.95	.85	NR	NR	NR	NR
ACETONITRILE (TR1 Chemical ID: 000075058)	AIR EUG	Pounds	NR	NR	NR	NR	NR	1.4	NR.	5	NR	NR	0
ACETONITRILE (TRI Chemical ID: 000075058)	AIR STACK	Pounds	NR	NR	NR	NR	NR	2	NR	NR	NR	5	5
ACETONITRILE (TRI Chemical ID: 000075058)	I CNINU	Pounds	NR	NR	NR	NR	NR	190893	NR	NR	NR	NR	0
ACETONITRILE (TRI Chemical ID: 000075058)	WATER	Pounds	NR	NR	NR.	NR	NR	343,3	NR	750	NR	NR	NR

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ACRYLIC ACID (TRI Chemical ID: 000079107)	AIR FUG	Pounds	NR.	NR	5	. 5	o	1	0	NR	NR	NR	5
ACRYLIC ACID (TRI Chemical ID: 000079107)	AIR STACK	Pounds	NR	NR	250	5	0	1,0	30	NR	NR	NR	0
ACRYLIC ACID (TRI Chemical ID: 000079107)	DISE NON METALS	Pounds	NR	NR	NR	NR	NR	NR	NR.	NR	NR	NR	5728
ACRYLIC ACID (TRI Chemical ID: 000079107)	ו נמומט	Pounds	NR	ŅR	3225	92525	22943	296771	3381	NR	NŘ	NR	44
ACRYLIC ACID (TRI Chemical ID: 000079107)	WATER	Pounds	NR	ŇR	2102	12616	9020.1	16229.1	21289.95	NR	NR	NR	NR
ACRYLONITRILE (TRI Chemical ID: 000107131)	AIR EUG	Pounds	NR	NR	5	5	0	3.4	25	NR	NR	NR.	250
ACRYLONITRILE (TRI Chemical ID: 00D107131)	AIR STACK	Pounds	NR	NR	250	5	3.9	115.2	2	NR	NR	5	5
ACRYLONITRILE (TRI Chemical ID: 000107131)	OTH DISP	Pounds	NR	NR	NR	140243	NR	NR	NR.	NR	NR	NR	NR
ACRYLONITRILE (TRI Chemical ID: 000107131)	UNINJ 1	Pounds	NR	NR	24705	37023	69022	40942	50274	NR	5187	NR	0
ACRYLONITRILE (TRI Chemical ID: 000107131)	WATER	Pounds	NR	NR	39.8	16289	20831	18037.55	15741.2	NR	5	NR	NR
ALLYL ALCOHOL (TRI Chemical ID: 000107186)	AIR FUG	Pounds	NR	:NR	NR	NR	NR	.2	NR	NR	NR	NR	NR
ALLYL ALCOHOL (TRI Chemical ID: 000107186)	AIR STACK	Pounds	NR	NR :	ŃR	NR	NŖ	22	NR	NR	NR	NR	NR
ALLYL ALCOHOL (TRI Chemical ID: 000107186)	LININU	Pounds	NR	NR	NR.	NR	NR	131813	NR.	NŔ	NR	NR	NR
ALUMINUM (FUME OR					į								

DUST) (TRI Chemical ID: (007429905)	WATER	Pounds	NR	NR	NR	NR.	NR	1198.85	2271.2	NR.	NR	1 NR	NR
ALUMINUM OXIDE (FIBROUS FORMS) (TRI Chemical ID: 001344281)	ו נמומט	Pounds	NR	NR	NR	NR	568	NR	NR.	NR	NR	NR	NR
ALUMINUM OXIDE (FIBROUS FORMS) (TRI Chemical ID: 001344281)	WATER	Pounds	NR	NR.	NR	NR	3268.6	NR	NR	NR	NR	ŊŖ	. NR
AMMONIA (TRI Chemical ID: 007664417)	AIR EUG	Pounds	NR	NR	NR	5	0	20.4	0	NR	NR	5	NR
AMMONIA (TRI Chemical ID: 007664417)	AIR STACK	Pounds	NR	NR	NR	5	6.8	8	194	NR	NR	5	NR.
AMMONIA (TRI Chemical ID: 007664417)	DISP NON METALS	Pounds	NR	NR	NR	827817	99678	106785.6	11681.9	NR	NR	250	NR
AMMONIA (TRI Chemical ID: 007664417)	I (NINU	Pounds	NR	NR	NR	11411	51025	3942	13501	NR	NR	NR	NR.
AMMONIA (TRI Chemical ID: 007664417)	WATER	Pounds	. NR	NR	NR.	96.1	49.2	348	4222.25	NR	1275	2055	NR
ANILAZINE (TRI Chemical ID: 000101053)	I (NINU	Pounds	NR	NR	NR	NR	40131	. NR	NR	NR	NR	NR	NR
ANILAZINE (TRI Chemical ID: 000101053)	WATER	Pounds	NR	· NR	NR	NR	.1	NR	NR.	NR	NR	NR	NR
ANILINE (TRI Chemical ID: 000062533)	AIR STACK	Pounds	NR	NR	. NR	NR	NR	NR	NR	NR	5	5	0
ANILINE (TRI Chemical ID: 000062533)	ו נמוחט	Pounds	NR	NR.	NR	NR.	. NR	10927	3800	NR	NR	NR	0
ANILINE (TRI Chemical ID: 000062533)	WATER	Pounds	NR	NR	NR	NR	NR	16.4	499.55	NR	NR	NR	NR

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BENZENE (TRI Chemical ID: 000071432)	AIR FUG	Pounds	250	250	250	5	NR.	.1.4	101.4	NR	NR	NR	NR
BENZENE (TRI Chemical ID: 000071432)	AIR STACK	Pounds	5	5	5	s	NR	12821.4	307	NR	NR	NR	NR
BENZENE (TRI Chemical ID: 000071432)	DISP NON METALS	Pounds	NR	NR	N R	21	NR	NR	61.85	. NR	ŅR	NR	NR
BENZENE (TRI Chemical ID: 000071432)	I CNINU	Pounds -	.9894	1.0171	73404	64300	NR.	39450	5753	NR	NR	NR	NR
BENZENE (TRI Chemical ID: 000071432)	WATER	Pounds	132	132	132	750	NR	910.85	151.25	NR	NR	NR	NR
BUTYL ACRYLATE (TRI Chemical ID: 000141322)	AIR EUG	Pounds	5	5	5	5	0	NR	NR	NR	NR	NR	5
BUTYL ACRYLATE (TRI Chemical ID: 000141322)	AIR STACK	Pounds	250	250	250	5	.48	· NR	NR	NR	NR	NR	0
BUTYL ACRYLATE (TRI Chemical IO: 000141322)	I [NINU	Pounds	NR	NR	2823	1824	7359	15502	NR	NR	NR	NR	o
BUTYL ACRYLATE (TRI Chemical ID: 000141322)	WATER	Pounds	0	0	2490	12725	11658	19059	20998.95	NR	NR	NR	NR
C.I. FOOD RED 15 (TRI Chemical ID: 000081889)	AIR FUG	Pounds	NR	NR	NR	5	NR	NR	NR.	NR	NR	NR	NR
C.I. FOOD RED 15 (TRI Chemical ID: 000081889)	AIR STACK	Pounds	NR	NR	NR	5	NR	NR	NR	NR	NR	NR	NR
C.1. FOOD RED 15 (TRI Chemical ID: 000081889)	I ENINU	Pounds	NR	NR	NR	36748	NR	NR	NR	NR	NR	NR	NR
CADMIUM (TRI Chemical ID: 007440439)	AIR FUG	Pounds	NR	NR	. 5	NR	NR	NR	NR	NR	NR	- NR	NR
CADMIUM	AIR									ă			

(TRI Chemical ID: 007440439)	STACK	Pounds	NR	NR	250	NR	NR	ŅŖ	·NR.	NR	NR	NR	NR
CADMIUM (TRI Chemical ID: 007440439)	DISP NON METALS	Pounds	NR	NR	8.44	NR	NR	NR.	NR.	NR	NR	NR	NR
CADMIUM (TRI Chemical ID: 007440439)	UNINI I	Pounds	NR	NR	13822	NR	NR	NR	NR	NR	NR	NR	NR
CADMIUM (TRI Chemical ID: 007440439)	WATER	Pounds	NR	NR.	13.25	NR	, NR	NR	NR	NR	NR	, NR	NR
CHLORINE (TRI Chemical ID: 007782505)	TUITULT	Pounds	NR	NR	NR	NR	. NR	NR	20651	NR	NR	NR	NR
CHLORINE (TRI Chemical ID: 007782505)	WATER	Pounds	NR	NR	NR	NR	NR	NR	141.45	NR	NR	NR	. NR
CHLOROBENZENE (TRI Chemical ID: 000108907)	AIR EUG	Pounds	NR	NR	NR	5	0	NR	NR	NR	NR	NR	NR
CHLOROBENZENE (TRI Chemical ID: 000108907)	AIR STACK	Pounds	NR	NR	NR	5	.017	. NR	NR	N R.	NR	NR	NR
CHLOROBENZENE (TRI Chemical ID: 000108907)	I (NINU	Pounds	NR	NR	NR	27905	18694	NR	NR.	NR	NR	NR	NR
CHLOROBENZENE (TRI Chemical ID: 000108907)	WATER	Pounds	NR	NR	NR	768	51.6	NR	NR	NR	NR	NR	NR
CHLOROFORM (TRI Chemical ID: 000067663)	air Eug	Pounds	NR	NR	NR	5	0	.6	NR	NR	NR	NR	NR
CHLOROFORM (TRI Chemical ID: 000067663)	AIR STACK	Pounds	NR	. NR	NR	5	0	5502	ŃR	NR	NR	NR	NR
CHLOROFORM (TRI Chemical ID: 000067663)	LCNIND	Pounds	NR	NR	NR	107774	89242	48822	NR	NR	NR	NR	NR
CHLOROFORM (TRI Chemical ID:	WATER	Pounds	NR	NR	NR	221	215	334.8	NR	NR	NR	NR	NR

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000067663)	<u> </u>				L		LJ	LJ	L			لــــا	الـــــا
CHROMIUM (TRI Chemical ID: 007440473)	AIR EUG	Pounds	NR	NR	. 5	NR	NR	NR	NR	NR	NR	NR	NR
CHROMIUM (TRI Chemical ID: 007440473)	AIR STACK	Pounds	NR	NR	250	NR	NR	- NR	NR.	NR	NR	NR	NR
CHROMIUM (TRI Chemical ID: 007440473)	DISP NON METALS	Pounds	NR	NR	1150.12	NR	6697.57	733.6	21.11	NR	NR	10970	NR
CHROMIUM (TRI Chemical ID: 007440473)	RCBA C	Pounds	NR	NR.	NR	NR	- 1047	NR	N R	NR	NR	NR	NR
CHROMIUM (TRI Chemical ID: 007440473)	I (NINU	Pounds	NR.	` NR	19608	NR	24733	32281	49329	NR	.NR	, NR	NR
CHROMIUM (TRI Chemical ID: 007440473)	WATER	Pounds	NR	NR	981.55	NR	1531	1962.5	4720.1	NR	800	. NR	NR
COPPER (TRI Chemical ID: 007440508)	OISP NON METALS	Pounds	NR	NR	NR	NR	NR	1196.4	NR	NR	NR	NR	NR
COPPER (TRI Chemical ID: 007440508)	L CUIND	Pounds	NR	NR	NR	NR	NR	17291	3775	NR	NR	N R	· NR
COPPER (TRI Chemical ID: 007440508)	WATER	Pounds	NR	NR	NR	NR	NR	471.5	1690.55	NR	NR	NR	NR
CREOSOTE (TRI Chemical ID: 008001589).	I (NINU	Pounds	NR.	. NR	NR	NR	NR	43188	11420	NR	NR	NŔ	NR
CREOSOTE (TRI Chemical ID: 008001589)	WATER	Pounds	NR	NR	NR	NR	NR.	0	487.6	NR	NR	NŔ	NR
CRESOL (MIXED ISOMERS) (TRI Chemical ID: 001319773)	WATER	Pounds	. NR	NR	NR.	NR	NR	NR	NR 	NR	250	NR	NR
CUMENE (TRI Chemical ID: 000098828)	AIR FUG	Pounds	5	5	5				NR		NR	NR	
ı	17	31	a l	1	iš l	1 1)		i i	[<u>}</u>			: #

CUMENE (TRI Chemical ID: 000098828)	AIR STACK	Pounds	250	250	250	5	NR	300.2	NR	NR.	NR	NR	٥
CUMENE (TRI Chemical ID: 000098828)	I CNINU	Pounds	NR	NR	35922	394068	2352	1723	NR	NR	NR	NR	Ċ
CUMENE (TRI Chemical ID: 000098828)	WATER	Pounds	414.9	414.9	414.9	3389	2230	3092.4	NR	NR	NR	NR	NR
CUMENE HYDROPEROXIDE (TRI Chemical ID: 000080159)	AIR EUG	Pounds	NR	NR	NR	5	NR	NR	NR	NR	NR	NR	NR
CUMENE HYDROPEROXIDE (TRI Chemical ID: 000080159)	AIR STACK	Pounds	NR	NR	NR	5	NR	NR:	NR	NR	NR	.NR	NR
CUMENE HYDROPEROXIDE (TRI Chemical ID: 000080159)	WATER	Pounds	NR	NR	NR	1178	NR	NR	NR	NR	NR	NR	NR
CYCLOHEXANE (TRI Chemical ID: 000110827)	AIR EUG	Pounds	5	5	5	5	. О	0	0	5	NR	NR	NR
CYCLOHEXANE (TRI Chemical ID: 000110827)	AIR STACK	Pounds	250	250	250	5	694	6.8	3.4	NR.	NR	NR	NR
CYCLOHEXANE (TRI Chemical ID: 000110827)	LCNINU	Pounds	NR.	ŃR	23603	32868	39269	28140	102621	NR	NŔ	NR	NR
CYCLOHEXANE (TRI Chemical ID: 000110827)	WATER	Pounds	424.95	424.95	424.95	'2342	2356	4612	593.2	250	250	NR	NR
CYCLOHEXANOL (TRI Chemical ID: 000108930)	AIR EUG	Pounds	NR	NR	NR	5	O	NR	NR	NR	NR	NR	NR
CYCLOHEXANOL (TRI Chemical ID: 000108930)	T (NINI)	Pounds	NR	NR	NR	4066	4325	2117	. NR	NR	NR	NR	NR
CYCLOHEXANOL (TRI Chemical ID: 000108930)	WATER	Pounds	NR	NR	NR :	2185	2145	3015.85	NR	NR	5	NR NR	NR
DIAMINOTOLUENE (MIXED													

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ISOMERS) (TRI Chemical ID: 025376458)	AIR STACK	Pounds	NR	NR	NR	NR	NR.	NR	NR	. NR	NR	5	NR
DIAZINON (TRI Chemical ID: 000333415)	AIR FUG	Pounds	NR	NR	5	5	O	NR	. NR	NR	NR	NR.	NR
DIAZINON (TRI Chemical ID: 000333415)	AIR STACK	Pounds	NR	NR	250	5	0	NR	NR	NR	NR	, NR	NR
DIAZINON (TRI Chemical ID: 000333415)	TOUIND	Pounds	NR	NR	NR	0	NR	NR	10	. NR	NR	NR	NR
DIAZINON (TRI Chemical ID: 000333415)	WATER	Pounds	NR	NR	2278.15	5841	10281.9	1196.95	5164.35	NR	1300	NR	NR
DICHLOROMETHANE (TRI Chemical ID: 000075092)	AIR FUG	Pounds	NR	NR	5	5	0	.4	40.6	NR	NR	NR	NR
DICHLOROMETHANE (TRI Chemical ID: 000075092)	AIR STACK	Pounds	NR	NR	250	. 5	3062.34	18524.2	23.8	NR	NR	NR	NR
DICHLOROMETHANE (TRI Chemical ID: 000075092)	ז נעזעה	Pounds	NR	NR	109038	54367	146734	107597	49658	NR	NR	, NR	NR
DICHLOROMETHANE (TRI Chemical ID: 000075092)	WATER	Pounds	NR	NR	298	2230	269	137.7	81.45	NR	250	NR	NR
DICYCLOPENTADIENE (TRI Chemical ID: 000077736)	AIR EUG	Pounds	NR	NR	, NR	0	0	NR	NR	5	. NR	NR	NR
DICYCLOPENTADIENE (TRI Chemical ID: 000077736)	I CNINU	Pounds	NR	NR	NR	87172	67956	18440	9446	NR	· NR	NR	NR
DICYCLOPENTADIENE (TRI Chemical ID: 000077736)	WATER	Pounds	NR	NR	NR	2352	3372.9	3430.55	1492	250	NR	NR	NR
DIETHANOLAMINE (TRI Chemical ID: 000111422)	AIR FUG	Pounds	NR	NR	5	0	С	NR	0	NR.	NR	NR	0
DIETHANQLAMINE	AIR												

(TRI Chemical ID: 000111422)	STACK	Pounds	ŅR	NR	250	. 0	o	NR	64	ŊR	NR	ŃR	0
DIETHANOLAMINE (TRI Chemical ID: 000111422)	TRIMINT	Pounds	NR	NR	83176	58807	42121	291879	21799	NR	NR	NR	0
DIETHANOLAMINE (TRI Chemical ID: 000111422)	WATER	Pounds	NR	NR	2.8	7212	20436.8	8948.3	7469.35	. NR	NR	NR	NR
DIMETHOATE (TRI Chemical ID: 000060515)	TRUIND	Pounds	NR	NR	NR.	NR	28795	NR	NR	NR	NR	NR	NR
DIMETHOATE (TRI Chemical ID: 000060515)	WATER	Pounds	NR	NR	, NR	NR	2610.05	NR	NR	NR	250	NR	NR
DIPHENYLAMINE (TRI Chemical ID: 000122394)	TUINT	Pounds	NR	NR	NR	NR	NR	201594	NR	NR	NR	NR	NR
DIPHENYLAMINE (TRI Chemical ID: 000122394)	WATER	Pounds	NR	NR	NŔ	NR	NR	3.35	NR	NR	NR	NR	NR
EPICHLOROHYDRIN (TRI Chemical ID: 000106898)	AIR STACK	Pounds	NR	NR	NR	. 0	NR	NR	NR	NR	NR	NR	5
EPICHLOROHYDRIN (TRI Chemical ID: 000106898)	DISP NON METALS	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	8069
EPICHLOROHYDRIN (TRI Chemical ID: 000106898)	ז נעזאֿח	Pounds	NR	NR	NR.	33865	NR	10015	NR	NR	NR	NR	12162
EPICHLOROHYORIN (TRI Chemical ID: 000106898)	WATER	Pounds	NR	NR	NR.	9	NR	15.5	NR	NR	NR	NR	NR
ETHYL ACRYLATE (TRI Chemical ID: 000140885)	AIR EUG	Pounds	NR	ŅR	. 5	ŃŔ	NR	NR	. NR	NR	N R	NR	NR
ETHYL ACRYLATE (TRI Chemical ID: 000140885)	AIR STACK	Pounds	NR	NR :	250	NR	NR	. NR	NR	NR	NR	NR	NR
ETHYL ACRYLATE (TRI Chemical ID:	I CNINU	Pounds	NR	NR	25229	NR	NŖ	NR	NR	NR	NR	NR	,NR

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000140885)	<u> </u>]	<u> </u>			<u></u>			لنا
ETHYL ACRYLATE (TRI Chemical ID; 000140885)	WATER	Pounds	NR	NR	301,35	NR	NR	NR	NR	NR	NR	NR	NR
ETHYLBENZENE (TRI Chemica! ID: 000100414)	AIR FUG	Pounds	5	5	5	5	0	0	120.2	5	NR	5	NR
ETHYLBENZENE (TRI Chemical ID: 000100414)	AIR STACK	Pounds	250	250	250	5	70.23	1041.2	347.6	NR	NR	NR	NR
ETHYLBENZENE (TRI Chemical ID: 000100414)	L(NIN)	Pounds	NR	. NR	28871	44708	18597	19487	16778	250	6059	250	NR
ETHYLBENZENE (TRI Chemical ID: 000100414)	WATER	Pounds -	250	250	400.1	2268	2610.05	5696.95	860.55	NR	. 5	NR.	NR
ETHYLENE (TRI Chemical ID: 000074851)	air Eug	Pounds	NR	NR	NR	NR	NR	NR	NR	. 5	NR	NR	NR
ETHYLENE (TRI Chemical ID: 000074851)	WATER	Pounds	NR	NR	NR	NR	NR	1528.5	1168.75	NR	NR	NR	NR
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	AIR EUG	Pounds	NR	NR	5	5	.8	.8	· NR	NR	NR	5	0
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	AIR STACK	Pounds	NR	NR	250	5	0	. 12	NR	NR	NR	NR	O
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	DISP NON METALS	Pounds	NR.	NR	NR 	NR	120432.88	NR	NR	NR	NR	NR.	NR
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	I [NINU	Pounds	NR	NR	155910	:483412	232310	159004	75410	NR	5	250	5
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	WATER	Pounds	NR	ŃR	3273.4	12797	13329.2	14715.65	16344.75	NR	2570	1109	750
EORMALDEHYDE (TRI Chemical ID: 000050000)	AIR FUG	Pounds	NR	5			NR	NR	NR	5	NR.	NR	0
(TRI Chemical ID: 000107211) FORMALDEHYDE (TRI Chemical ID:	AIR				· ·	5							

1	H :	t: .				. 1		η	ı ı	11 1	, ,	, ,	n d
FORMALDEHYDE (TRI Chemical ID: 000050000)	AIR STACK	Pounds	NR.	250	250	5	122	NR	NR	NR	250	250	250
FORMALDEHYDE (TRI Chemical ID: 000050000)	DISP NON METALS	Pounds	NR	NR	NR	NR	NR	NR.	NR	NR	NR	NR	250
FORMALDEHYDE (TRI Chemical ID: 000050000)	UNIN) I	Pounds	NR	41999	202981	471880	457635	299000	131590	14800	6059	9843	34522
FORMALDEHYDE (TRI Chemical ID: 000050000)	WATER	Pounds	NR	8	8	2038	11.6	29.8	3232.3	7800	5	NR	NR
FORMIC ACID (TRI Chemical ID: 000064186)	1_[[N]NU	Pounds	NR	NR	NR	NR	NR	NR	44776	NR	NR	· NR	NR
FORMIC ACID (TRI Chemical ID: 000064186)	WATER	Pounds	NR	NR	NR	NR	· NR	NR	9.65	NR	NR	NR	NR
HEXACHLOROBENZENE (TRI Chemical ID: 000118741)	I CNINU	Pounds	NR	NR	NR	54	NR	1	NR	NR	· NR	NR	NR
HEXACHLOROPHENE (TRI Chemical ID: 000070304)	AIR EUG	Pounds	NR	NR	5	NR	NR	NR	NR	NR	NR	NR	NR
HEXACHLOROPHENE (TRI Chemical ID: 000070304)	AIR STACK	Pounds	N R.	NR	5	· NR	NR	NR	NR	NR	NR	NR	NR
HEXACHLOROPHENE (TRI Chemical ID: 000070304)	LCNINU	Pounds	NR.	NR	527	NR	NR	NR	NR.	NR	NR	NR	NR
HYDROCHLORIC ACID (1995 AND AFIER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007647010)	AIR STACK	Pounds	NR	NR	NR	NR	NR	9168	10633.4	NR	NR	· NR	NR
HYDROCHLORIC ACID (1995 AND AFTER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007647010)	DISE	Pounds	NR	NR	NR	NR	NR	10659.6	9928.8	·NR	NR	NR	NR
HYDROCHLORIC ACID (1995										1			[·]

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•													
AND AFTER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007647010)	I GNINU	Pounds	NR	NR	NR	NR	NR	235412	355322	NR	NR	, NR	NR
HYDROCHLORIC ACID (1995 AND AFTER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007647010)	WATER	Pounds	NR	NR	NR	NR	NR	24612.45	10204.3	NR	NR	NR	NR.
HYDROGEN FLUORIDE (TRI Chemical ID: 007664393)	DISP NON METALS	Pounds	NR	NR	NR	NR	· NR	NR	NR	NR	NR	24625	NR
HYDROGEN FLUORIDE (TRI Chemical ID: 007664393)	ז נמזמט	Pounds	NR	NR	NR	NR	NR	32838	14385	NR	NR	NR	NR
HYDROGEN FLUORIDE (TRI Chemical ID: 007664393)	WATER	Pounds	NR	· NR	NR	NR	NR	185.2	159.65	NR	NR	NR	NR
ISOPROPYL ALCOHOL (MANUFACTURING.STRONG- ACID PROCESS ONLY.NO SUPPLIER) (TRI Chemical ID: 000067630)	AIR EUG	Pounds	NR	NR	NR	NR	NR	2.2	5	NR	NR	NR	NR
ISOPROPYL ALCOHOL (MANUFACTURING.STRONG- ACID PROCESS ONLY.NO SUPPLIER) (TRI Chemical ID: 000067630)	AIR STACK	Pounds	NR	NR	NR	NR	NR	.92	32	NR	NR	NR	NR
ISOPROPYL ALCOHOL IMANUFACTURING.STRONG- ACID PROCESS ONLY NO SUPPLIER) (TRI Chemical ID: 000067630)	UNIN) I	Pounds	NR	NR	NR	NR.	NR	488577	194135	NR	NR	NR.	NR
ISOPROPYL ALCOHOL (MANUFACTURING. STRONG- ACID PROCESS ONLY NO SUPPLIER) (TRI Chemical ID: 000067630)	WATER	Pounds	NR	NR	NR.	NR	NR	606.75	6266.25	NR	NR	NR	NR

LEAD (TRI Chemical ID: 007439921)	AIR FUG	Pounds	NR	NŘ	1	NR		NŔ	`NR	NR	NR	NR	NR
LEAD (TRI Chemical ID: 007439921)	AIR STACK	Pounds	NR	NR	1	NR	. 0	NŔ	NR	NR	NR	NR	,NR
LEAQ (TRI Chemical ID: 007439921)	<u>DISP</u> METALS	Pounds	NR.	NR	NR	4580	··; NR	NR	NR	NR	NR	NR	NR
LEAD (TRI Chemical ID: 007439921)	DISP NON METALS	Pounds	NR	NR	19.73	4690	120432	1376.85	59928.7	NR	'nR	14502	NR
LEAD (TRI Chemical ID: 007439921)	OTH LANDE	Pounds	NR	NR	NR	4580	NR	NR	NR	NR	NR	NR	NR
LEAD \ (TRI Chemical ID: 007439921)	I CNINU	Pounds	NR	NR	4254	3711	5102	10211	6225	NR	NR	NR	NR
LEAD (TRI Chemical ID: 007439921)	WATER	Pounds	NR	NR	430.15	207	607.25	442.1	1329.8	NR	NR	NR	NR
M-XYLENE (TRI Chemical ID: 000108383)	AIR FUG	Pounds	NR	NR	NR	5	0	0	NR	NR	NR	NR 	NR.
M-XYLENE (TRI Chemical ID: 000108383)	AIR STACK	Pounds	NR	NR	NR 	5	58.81	.6	NR	. NR	NR	NR	NR
M-XYLENE (TRI Chemical ID: 000108383)	UNIN) I	Pounds	. NR	NR	NR	406	NR	· NŔ	NR	NR	NR	NR	NR
M-XYLENE (TRI Chemical ID: 000108383)	WATER	Pounds	NR	NR	NR	2185	2144.15	3011.25	ŊŖ	NR	NR	NR	NR
MALATHION (TRI Chemical ID: 000121755)	AIR EUG	Pounds	NR	NR	5	0	0	NR	NR	5	NR.	NR	ŊR
MALATHION (TRI Chemical ID: 000121755)	AIR STACK	Pounds	NR	NR	5	0	0	NR	, NR	NR	.NR	ŃR	NR
MALATHION													

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(TRI Chemical ID: 000121755)	ז נאזאט	Pounds	NR	NR	68	88	171	226	1858	5	NR	NR	NR
MALATHION (TRI Chemical ID: 000121755)	WATER	Pounds	NR	NR	2278.18	5840	10283.3	1181.55	5170.7	250	5	NR	NR
MALEIC ANHYDRIDE (TRI Chemical ID: 000108316)	I CNINU	Pounds	NR	NR	NR	NR	24746	38533	11320	NR	NR	NR	NR
MALEIC ANHYDRIDE (TRI Chemical ID: 000108316)	WATER	Pounds	NR	NR	NR	NR	2163.75	298.75	15.15	NR	NR	NR	NR
MERCURY (TRI Chemical ID: 007439976)	AIR FUG	Pounds	NR	NR	1	Ó	. 0	NR	NR.	NR	· NR	NR	NR
MERCURY (TRI Chemical ID: 007439976)	AIR STACK	Pounds	NR	·NR	1	0	0	NR	NR	NR	NR	NR	NR
MERCURY (TRÍ Chemical ID: 007439976)	DISP NON METALS	Pounds	NR	NR	52.11	213	202.79	5.5	NR	NR	NR	NR	.NR
MERCURY (TRI Chemical ID: 007439976)	I CNINU	Pounds	NR	NR	4	39	174	187	522	NR	NR	NR	NR
MERCURY (TRI Chemical ID: 007439976)	WATER	Pounds	NR	NR	. 4.4	3	8	.6	.1	NR	NR	NR	NR
METHANOL (TRI Chemical ID: 000067561)	AIR FUG	Pounds	5	5	5	5	0	3.2	30	5	NR	NR	250
METHANOL (TRI Chemical ID: 000067.561)	AIR STACK	Pounds	250	250	250	652	889	56.6	6.6	250	NR	NR	5
METHANOL (TRI Chemical ID: 000067561)	DISP NON METALS	Pounds	NR	NR.	20230	46162	34871	85440.4	17729.2	NR	NR	NR	5
METHANOL (TRI Chemical ID: 000067561)	TCUIUN	Pounds	NR	NR	676584	1579734	1034114	1200784	639893	5	250	250	1576
METHANOL (TRI Chemical ID:	WATER	Pounds	o	0	1499.85	5451	8826.8	8180.55	42790.15	250	250	NR	1412

000067561)	J				L					<u> </u>			لـــــا
METHYL ETHYL KETONE (TR.: Chemical ID: 000078933)	AIR EUG	Pounds	NR	NR	NR	NR	NR	5.4	292.6	5	NR	5	NR
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	AIR STACK	Pounds	NR	NR	NR	NR	· NR	304	111.4	5	5	250	NR
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	UNIND I	Pounds	NR	NR	NR	NR	NR	115274	51785	NR	NR	NR	NR
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	WATER	Pounds	NR	NR	NR	NR	NR	4649.55	3255.5	2760	250	NR	NR
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	AIR EUG	Pounds	5	5	5	5	0	0	91.6	NR	NR	NR	NR
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	AIR STACK	Pounds	250	250	250	100	136.7	84.8	62.8	NR	NR	NR	NR
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	L (NINU	Pounds	NR	NR	43579	198240	51040	39533	11998	NR	NR	NR	NR
METHYL ISOBUTYL KETONS (TRI Chemical ID: 000108101)	WATER	Pounds	0	0	406.85	- 2243	2249.95	3176.75	583.85	NR	250	NR	NR
METHYL METHACRYLATE (TRI Chemical ID: 000080626)	AIR FUG	Pounds	NR	5	5	5	. 0	3	· NR	NR	NR	NR	NR
METHYL METHACRYLATE (TRI Chemical ID: 000080626)	AIR STACK	Pounds	NR	250	250	5	3.9	32	'NR.	NR	5	5	NR
METHYL METHACRYLATE (TRI Chemical IO: 000080626)	DISP NON METALS	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	250	NR	NR
METHYL METHACRYLATE (TRI Chemical ID: 000080626)	LCNINU	Pounds	NR	NR	22327	40513	17449	2846	NR	NR.	NR	NR	NR
METHYL METHACRYLATE (TRI Chemical ID: 000080626)	WATER	Pounds	NR	0	395.75	4925	2145	3017.8	NR	NR	250	NR	NR

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METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	AIR FUG	Pounds	NR	NR	NR	5	0	3.6	20	NR	NR	NR	250
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	AIR STACK	Pounds	NR	NR	NR	1305	1798.19	22.2	11.6	NR	250	24	250
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	L [NINU	Pounds	NR	NR	. NR	12784	15252	37547	24904	NR	NR	NR.	250
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	WATER	Pounds	NR	NR	NR	2186	2144.15	3012.55	5217.05	NR	NR	NR	NR
METHYLENE BROMIDE (TRI Chemical ID: 000074953)	AIR FUG ,	Pounds	NR	NR	NR	5	0	NR	NR	NR	NR	NR	NR
METHYLENE BROMIDE (TRI Chemical ID: 000074953)	AIR STACK	Pounds	NR	NR	NR	5	. 0	, NR	NR	NR	NR	NR	√NR
METHYLENE BROMIDE (TRI Chemical ID: 000074953)	nuini i	Pounds	NR	NR	NR	28948	20298	NR	NR	NR	NR	NR	NR
N.N-DIMETHYLFORMAMIDE (TRI Chemical ID: 000068122)	AIR EUG	Pounds	NR	NŘ	NR	NR	0	NR	0	5	NR	NR	NR
N.N-DIMETHYLFORMAMIDE (TRI Chemical ID: 000068122)	AIR STACK	Pounds'	NR	NR	NR.	NR	0	NR	10	NR	NR	NR	NR
N.N-DIMETHYLFORMAMIDE (TRI Chemical ID: 000068122)	UNIN) I	Pounds	NR	NR	NR	NR	63253	130221	162025	NR	NR	NR	NR
N.N-DIMETHYLFORMAMIDE (TRI Chemical ID: 000068122)	WATER	Pounds	NR	NR.	NR	NR	315.35	1.25	467.5	NR	NR	NR	NR
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	AIR EUG	Pounds	5	NR	5	5	, 0	. 0	o	5	NR	NR	0
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	AIR STACK	Pounds	5	NR	250	101	43.51	.2	o	NR	NR	5	5
N-BUTYL ALCOHOL													

(TRI Chemical ID: 000071363)	ו נמומט	Pounds	NR	NR	64187	242672	295189	218397	265283	NR	NR	NR	0
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	WATER	Pounds	NR	NR	428.75	2865	3236.9	5283	15165.75	250	750	. NR	NR
N-HEXANE (TRI Chemical ID: 000110543)	AIR FUG	Pounds _.	· NR	NR	5	5	0	11.8	15	5	. NR	NR	0
N-HEXANE (TRI Chemical ID: 000110543)	AIR STACK	Pounds	NR	N R.	5	790	1078.96	13	293.8	ŊR	. 5	8	5
N-HEXANS (TRI Chemical ID: 000110543)	DISP NON METALS	Pounds	NR	NR	NR	ŃR	NR	NR	NR	NR	NR	NR	5
N-HEXANE (TRI Chemical ID: 000110543)	I (NINU	Pounds	NR	NR	128115	91664	238221	328211	71892	NR	NR	NR	0
N-HEXANE (TRI Chemical ID: 000110543)	WATER	Pounds	NR	NR	1575.5	3793	3803.9	5185.7	1633.15	750	NR	NR	NR
N-METHYL-2-PYRROLIDONE (TRI Chemical ID: 000872504)	TENINA	Pounds	. NR	NR	NR	NR	NR	164395	NR	NR	NR.	NR	NR
N-METHYL-2-PYRROLIDONE (TRI Chemical ID: 000872504)	WATER	Pounds	NR	NR	NR	NR	NR	3066.8	NR	NR	NR	NR	NŘ
NAPHTHALENE (TRI Chemical ID: 000091203)	AIR EUG	Pounds	5	5	5	5	NR	0	98.8	NR	NR	. NR	NR
NAPHTHALENE (TRI Chemical ID: 1000091203)	AIR STACK	Pounds	250	250	250	5	NR	111.2	115.6	NR	NR	NR	NR
NAPHTHALENE (TRI Chemical ID: 000091203)	I (NINU	Pounds	NR	NR ·	37874	58380	NR	10104	5124	NR	NR	NR	ŊR
NAPHTHALENE (TRI Chemical ID: 000091203)	WATER	Pounds	0	Q	396.75	2326	NR	3131.55	786.55	NR	NR	ŃR	NR
NICKEL (TRI Chemical ID:	DISP NON	Pounds	NR	NR	NR	NR	NR	1955.81	422.16	NR	NR	NR	ŊŖ

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007440020)	METALS												
NICKEL (TRI Chemical ID: 007440020)	TCUTUN	Pounds	NR	NIR	NR	NR	NR	17263	32675	NR	NR	NR	NR
<u>NICKEL</u> (TRI Chemical ID: 007440020)	WATER	Pounds	NR	NR	NR	NR	NR	658.6	3931.6	NR	NR	NR	NR
NICKEL COMPOUNDS (TRI Chemical ID: N495)	DISP METALS	Pounds	ŅR	NR	NR	NR	NR	NR	NR	NR	66224	NR	NR
NICKEL COMPOUNDS (TRI Chemical ID: N495)	WATER		NR	NR	NR	NR	N R	NR	NR	NR	1300	NR	NR
NITRIC ACID (TRI Chemical ID: 007697372)	AIR FUG	Pounds	. NR	NR	NR	. 5	0	NR	ŃR	NR	NR	NR	O
NITRIC ACID (TRI Chemical ID: 007697372)	AIR STACK	Pounds	NR	NR	NR	5	0	NR	NR	NR	NR	NR	5
NITRIC ACID (TRI Chemical ID: 007697372)	DISP NON METALS	Pounds	NR	ŊR	NR	34637	15398.4	7284	NR	187100	NR	148167	15233
NITRIC ACID (TRI Chemical ID: 007697372)	I CNINU	Pounds	NR	NR	NR	70724	46188	105126	34612	NR	NR	250	750
NITRIC ACID (TRI Chemical ID: 007697372)	WATER	Pounds	NR	NR	NR	445	519.5	431.3	3910.15	NR	NR	NR	5
NITROBENZENE (TRI Chemical ID: 000098953)	AIR STACK	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	NR	5	NR
NITROBENZENE (TRI Chemical ID: 000098953)	I CNINU	Pounds	NR	NR	NR	NR	, NR	NR	NR	NR	NR	250	NR
O-XYLENE (TRI Chemical ID: 000095476)	AIR EUG	Pounds	NR	NR	NR	NR	NR	NR	162.4	NR	NR	NR.	NR
O-XYLENE (TRI Chemical ID: 000095476)	AIR STACK	Pounds	. NR	NR	NR	NR	NR	NR	1029.4	NR	NR	NR	NR
O-XYLENE (TRI Chemical ID:	ו נמומט	Pounds	NR	NR	NR	NR	NR	NR	22730	NR	NR.	NR.	NR

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AIR FUG	Pounds	NR.	NR	NR	5	D	NR	NR 	NR	NR	NR	NR
AIR STACK	Pounds	NR	· NR	NR	5	0	NR	NR	NR	NR	NR	NR
ו נמומט	Pounds	NR	NR	NR	406	349	NR	NR	NR	NR	NR	NR
WATER	Pounds	NR	NR	NR	2186	2144.15	3011.25	NR	NR	NR	NR	NR
AIR EUG	Pounds	NR	NR	NR	5	NR	NR	NR	NR	NR	NR	0
AIR STACK	Pounds	NR	NR	NR	. 5	NR	ŊŖ	NR	NR	NR	NR	5
I (NINU	Pounds	NR	NR	NR	251589	NR	28714	- 88165	NR	NR	NR	250
WATER	Pounds	NR	ŅŔ	NR	201	NR.	36.6	6093.3	NR	6000	NR	1027
AIR STACK	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	250
DISP NON METALS	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	15904
L CUIND	Pounds	NR	NR.	NR	, NR	NR	NR	NR	NR	NR	NR	750
WATER	Pounds	· NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	830
I CNINU	Pounds	NR	NR	NR	. NR	. NR	46904	15873	NR	NR	NR	NR
	AIR FUG AIR STACK WATER AIR EUG AIR STACK UNINJ I WATER AIR STACK UNINJ I WATER UNINJ I WATER WATER WATER	AIR Pounds STACK Pounds UNINI Pounds WATER Pounds AIR Pounds AIR Pounds UNINI Pounds AIR Pounds AIR Pounds WATER Pounds AIR Pounds DISP Pounds Pounds	AIR FUG Pounds NR STACK Pounds NR UNIN] I Pounds NR WATER Pounds NR AIR FUG Pounds NR UNIN] Pounds NR WATER Pounds NR UNIN] Pounds NR WATER Pounds NR UNIN] Pounds NR UNIN] Pounds NR UNIN] Pounds NR WATER Pounds NR WATER Pounds NR WATER Pounds NR	AIR FLIG Pounds NR	AIR FUG Pounds NR NR NR NR NR STACK Pounds NR	AIR FUG Pounds NR NR NR S AIR STACK Pounds NR NR NR NR S UNINII Pounds NR NR NR A06 WATER Pounds NR NR NR 2186 AIR EUG Pounds NR NR NR 5 UNINII Pounds NR NR NR 251589 WATER Pounds NR NR NR 201 AIR STACK Pounds NR NR NR NR UNINI Pounds NR NR NR NR	AIR FUG Pounds NR NR NR NR 5 0 AIR STACK Pounds NR NR NR NR 5 0 UNINII Pounds NR NR NR 406 349 WATER Pounds NR NR NR 2186 2144.15 AIR FUG Pounds NR NR NR 5 NR AIR STACK Pounds NR NR NR 5 NR UNINII Pounds NR NR NR 221589 NR WATER Pounds NR NR NR 201 NR AIR STACK Pounds NR NR NR NR NR AIR STACK Pounds NR NR NR NR NR MATER Pounds NR NR NR NR NR NR METALS Pounds NR NR NR NR NR WATER Pounds	AIR FUG Pounds NR NR NR S D NR AIR STACK Pounds NR NR NR NR S D NR UNINII Pounds NR NR NR NR 406 349 NR WATER Pounds NR NR NR 2186 2144.15 3011.25 AIR FUG Pounds NR NR NR 5 NR NR AIR STACK Pounds NR NR NR 5 NR NR UNINJ Pounds NR NR NR 251589 NR 28714 WATER Pounds NR NR NR NR NR NR NR DISP NON Pounds NR NR NR NR NR NR NR UNINJ Pounds NR NR NR NR NR NR NR NR NR WATER Pounds NR NR NR	AIR FUG Pounds NR NR NR S D NR NR AIR STACK Pounds NR NR NR NR S D NR NR UNINI I Pounds NR NR NR 406 349 NR NR WATER Pounds NR NR NR 2186 2144.15 3011.25 NR AIR EUG Pounds NR NR NR 5 NR NR NR AIR STACK Pounds NR NR NR 251589 NR 28714 -88165 WATER Pounds NR NR NR 201 NR 36.6 6093.3 AIR STACK Pounds NR NR <td>AIR FUG Pounds NR NR NR S D NR NR NR AIR STACK Pounds NR NR NR NR S D NR NR NR UNINII Pounds NR NR NR NR 406 349 NR NR NR WATER Pounds NR NR NR 2186 2144.15 3011.25 NR NR NR AIR FUG Pounds NR NR NR 5 NR NR NR NR NR UNINII Pounds NR NR NR NR NR 251589 NR 28714 -88165 NR WATER Pounds NR NR NR NR 201 NR 36.6 6093.3 NR AIR STACK Pounds NR N</td> <td>AIR PUG Pounds NR NR NR 5 0 NR NR NR NR AIR STACK Pounds NR NR<td>AIR FUG Pounds NR NR NR NR 5 D NR NR</td></td>	AIR FUG Pounds NR NR NR S D NR NR NR AIR STACK Pounds NR NR NR NR S D NR NR NR UNINII Pounds NR NR NR NR 406 349 NR NR NR WATER Pounds NR NR NR 2186 2144.15 3011.25 NR NR NR AIR FUG Pounds NR NR NR 5 NR NR NR NR NR UNINII Pounds NR NR NR NR NR 251589 NR 28714 -88165 NR WATER Pounds NR NR NR NR 201 NR 36.6 6093.3 NR AIR STACK Pounds NR N	AIR PUG Pounds NR NR NR 5 0 NR NR NR NR AIR STACK Pounds NR NR <td>AIR FUG Pounds NR NR NR NR 5 D NR NR</td>	AIR FUG Pounds NR NR NR NR 5 D NR

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PHTHALIC ANHYDRIDE (TRI Chemical ID: 000085449)	WATER	Pounds	NR	NR	NR	NR	NR	0	104	. NR	NR	NR	NR
PYRIDINE (TRI Chemical ID: 000110861)	AIR FUG	Pounds	NR	NR	NR	5	NR	NŖ	· NR	NR	NR	NR	NR
PYRIDINE (TRI Chemical ID: 000110861)	AIR STACK	Pounds	NR	NR	NR	5	NR	NR	NR	NR	NR	NR	NR
PYRIDINE (TRI Chemical ID: 000110861)	LENINU	Pounds	NR	NR	NR	52614	NR	2115	9769	NR	NR	NR	NR
PYRIDINE (TRI Chemical ID: 000110861)	WATER	Pounds	NR	NR	NR	NR	NR.	1.5	363.25	NR	1026	NR	NR
SEC-BUTYL ALCOHOL (TRI Chemical ID: 000078922)	AIR EUG	Pounds	NR	NR.	NR	5	o	NR	NR	. 5	NR	NR	· NR
SEC-BUTYL ALCOHOL (TRI Chemical ID: 000078922)	AIR STACK	Pounds	· NR	NR	NR	5	. 0	NR	NR	NR	NR	NR	NR
SEC-BUTYL ALCOHOL (TRI Chemical ID: 000078922)	I ENINU	Pounds	NR	NR	NR	4499	3627	2110	8856	NR	NR	NR	NR
SEC-BUTYL ALCOHO: (TRI Chemical ID: 000078922)	WATER	Pounds	NR	- NR	NR	2197	2144.15	3011.25	182	NR	NR	NR	NR
SODIUM NITRITE (TRI Chemical ID: 007632000)	ו נאואט	Pounds	NR	NR	NR	NR	NR	796	8952	NR	NR	NR	NR
SODIUM NITRITE (TRI Chemical ID: 007632000)	WATER	Pounds	NR	NR	NR	NR	NR	678.35	972.3	NR	NR	36318	NR
STYRENE (TRI Chemical ID: 000100425)	AIR FUG	Pounds	5	5	5	5	0	Đ	226	. 5	NR	NR	0
STYRENE (TRI Chemical ID: 000100425)	AIR STACK	Pounds	. 250	250	250	35	46.71	4519.8	240.6	NR	5	5	5
STYRENE	DISP												

(TRI Chemical ID; 000100425)	NON METALS	Pounds	NR.	NR	NR	ŊŖ	NR	NR	NR	, NR	NR	ŅR	1153
STYRENE (TRI Chemical ID: 000100425)	TRUING	Pounds	NR	ŅR	65393	37362	53413	46524	16469	NR	NR	NR	250
STYRENE (TRI Chemical ID: 000100425)	WATER	Pounds	o	O	592,35	3733	3502.35	4136.1	1750.7	5	5	NR	5
SULFURIC ACID (1994 AND AFTER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007664939)	DISP NON METALS	Pounds	NR	ŅR	NR	NR	NR	38314.16	39006	NR	NR	NR	NR
SULEURIC ACID (1994 AND AFTER "ACID AEROSOLS" QNLY) (TRI Chemical ID: 007664939)	L CNINU	Pounds	NR	NR	NR -	ŅR	NR	241620	149996	NR	NŔ	NR	NR
SULFURIC ACID (1994 AND AFTER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007664939)	WATER	Pounds	NR	NR	NR	NR	, N R	10588.6	48649.5	NR	NR	NR	NR
TERT-BUTYL ALCOHOL (TRI Chemical ID: 000075650)	AIR EUG	Pounds	NR	ŃR	NR	5	0	.4	, 0	5	Ν̈́R	NR	NR
TERT-BUTYL ALCOHOL (TRI Chemical ID: 000075650)	AIR STACK	Pounds	NR	ŅR	NR	223	. 0	61	51.4	NR	NR	NR	NR
TERT-BUTYL ALCOHOL (TRI Chemical ID: 000075650)	UNINI I	Pounds	NR	NR.	NR	1280	3086	9170	15002	NR	NR	NR	NR
TERT-BUTYL ALCOHOL (TRI Chemical ID: 000075650)	WATER	Pounds	NR	NR.	NR	2198	2201.25	3059.3	149.6	NR	NR	NR	NR
TETRACHLOROETHYLENE (TRI Chemical ID: 000127184)	AIR EUG	Pounds	NR	NR	N/R	5	. 0	NR	NŘ	NR	ŃЯ	ŅR	NR
TETRACHLOROETHYLENE (TRI Chemical ID: 000127184)	AIR STACK	Pounds	NR	NR	NR	5	0	NŘ	NR	NR	NR	NR	NR

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TETRACHLOROETHYLENE (TRI Chemical ID: 000127184)	I (MINU	Pounds	NR	NR	NR	62860	43919	NR	NR	NR	NR	NR	NR
TETRACHLOROETHYLENE (TRI Chemical ID: 000127184)	WATER	Pounds	NR	NŔ	NR	2	NR	NR	NR	NR	NR	NR	NR.
TOLUENE (TRI Chemical ID: 000108883)	AIR FUG	Pounds	5	5	Ś	5	16.2	16.2	299.4	5	NR	5	750
TOLUENE (TRI Chemical ID: 000108883)	AIR STACK	Pounds	250	250	250	148	201.73	5669.4	898.6	NR	250	750	. 0
TOLUENE (TRI Chemical ID: 000108883)	OTH LANDE	Pounds	NR	NR	22519	NR	NR	NR	NR	NR	NR	NR	NR
TOLUENE (TRI Chemical ID: 000108883)	I <u>CNINU</u>	Pounds	NR	1429	151592	713888	450205	430285	320992	750	144	366	250
TOLUENE (TRI Chemical ID: 000108883)	WATER	Pounds	0	0	896.1	2954	3630.85	5597.7	4314.35	NR	250	NR	NR
TOLUENE DIISOCYANATE (MIXED ISOMERS) (TRI Chemical ID: 026471625)	AIR FUG	Pounds	NR	NR.	5	ŃR		.NR	NR	NR	NR	NR	NR
TOLUENE DIISOCYANATE (MIXED ISOMERS) (TRI Chemical ID: 026471625)	AIR STACK	Pounds	NR	NR	5	NR	0	NR	NR	NR	ŅR	NR	NR
TOLUENE DIISOCYANATE (MIXED ISOMERS) (TRI Chemical ID: 026471625)	LONINU	Pounds	NR	NR	70	NR	20080	NR.	NR	NR	NR	NR	NR
TRICHLOROFTHYLENE (TRI Chemical ID: 000079016)	AIR EUG	Pounds	NR	NR	NR	5	0	NR	NŔ	NR	NR	NR	NR
TRICHLOROETHYLENE (TRI Chemical ID: 000079016)	AIR STACK	Pounds	NR	NR	NR	5	.003	NR	NR	NR	NR	NR	NR
TRICHLOROETHYLENE (TRI Chemical ID:	I (NINU	Pounds	NR	NR	NR	86817	39881	10884	NR	NR	NR	NR	NR

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000079016)										<u> </u>			\sqsubseteq
TRICHLOROFTHYLENE (TRI Chemical ID: 000079016)	WATER	Pounds	NR	NR	NR	2	3.45	2.75	NR	NR	NR	NR	NR
TRIETHYLAMINE (TRI Chemical ID: 000121448)	AIR STACK	Pounds	NR	NR	NR	NR	. 0	NR	2	NR	NR	NR	NR
TRIETHYLAMINE (TRI Chemical ID: 000121448)	TCUIUN	Pounds	NR	NR	NR	NR.	31762	10700	3371	NR	NR	NR	NR
TRIETHYLAMINE (TRI Chemical ID: 000121448)	WATER	Pounds	NR	NR	NR	NR	16.5	0	603.55	NR	1810	NR	NR
VINYL ACETATE (TRI Chemical ID: 000108054)	AIR FUG	Pounds	5	5	5	. NR	NR	NR	164.6	5	NR	NR	o
VINYL_ACETATE (TRI Chemical ID: 000108054)	AIR STACK	Pounds	250	250	250	NR	NR	NR.	0	-250	NR	NR	5
VINYL ACETATE (TRI Chemical ID: 000108054)	DISP NON METALS	Pounds	NR	NR	NR	NR	NR	NR	NR	250	NR	NR	3272
VINY: ACFTATE (TRI Chemical ID: 000108054)	T (NIND	Pounds	NR	NR	20	NR	NR	78454	1500	NR	NR	NR	0
VINYL ACETATE (TRI Chemical ID: 000108054)	WATER	Pounds	0	. 0	2633.65	NR	NR	755.75	1752.75	250	NR	NR	NR
VINYL CHLORIDE (TRI Chemical ID: 000075014)	AIR STACK	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	250
VINYL CHLORIDE (TRI Chemical ID: 000075014)	DISP NON METALS	Pounds	NR	NR	NR	. NR	NR	NR	NR.	NR	NR	NR	1151
VINYL CHLORIDE (TRI Chemical ID: 000075014)	I CNINU	Pounds	NR	NR	NR	NR	NR	. NR	NR	NR	NR	NR	5
VINYLIDENE CHLORIDE (TRI Chemical ID: 000075354)	AIR STACK	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	NR	6	0

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VINYLIDENE CHLORIDE (TRI Chemical ID: 000075354)	ו נמנמט	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	45812
VINYLIDENE CHLORIDE (TRI Chemical ID: 000075354)	WATER	Pounds	NR	NR	NR	NR	· NR	NR.	NR	NR	NR	NR	250
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	AIR FUG	Pounds	5	5	5	5	o	1.8	336.2	. 5	NR	5	250
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	AIR STACK	Pounds	250	250	250	5	0	3524.2	1555.6	NR	5	250	0
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	L CNINU	Pounds	NR	NR	338195	882215	871135	735552	- 513791	750	250	521	2538
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	WATER	Pounds	250	250	2643.6	10268	10742.5	12995.5	16324.45	250	6280	NR	NR

Discharge of Chemicals Into Streams or Bodies of Water:

For all releases estimated as a range, the mid-point of the range was used in these calculations. Rows with Release Amount equal to "O" were not listed.

Chemical Name	Year	Unit Of Measure	Release Amount	Stream Or Body of Water
1.2.4-TRIMETHYLBENZENE (TRI Chemical ID: 000095636)	2003	Pounds	48	HOUSTON SHIP CHANNEL
1.2.4-TRIMETHYLBENZENE (TRI Chemical ID: 000095636)	2002	Pounds	649.15	HOUSTON SHIP CHANNEL
1.2-DIBROMOETHANE (TRI Chemical ID: 000106934)	2003	Pounds	121.25	HOUSTON SHIP CHANNEL
1.2-DIBROMOETHANE (TRI Chemical ID: 000106934)	2002	Pounds	11.3	HOUSTON SHIP CHANNEL
1.2-DICHLOROETHANE (TRI Chemical ID: 000107052)	2004	Pounds	1.4	HOUSTON SHIP CHANNEL
1.2-DICHLOROETHANS (TRI Chemical ID: 000107062)	2003	Pounds	23.85	HOUSTON SHIP CHANNEL
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1.2-DICHLOROETHANE	R 1			hiorican cura I
(TRI Chemical ID: 000107062)	2002	Pounds	1	HOUSTON SHIP CHANNEL
1.4-DICHLOROBENZENE (TRI Chemical ID: 000106467)	2006	Pounds	250	HOUSTON SHIP CHANNEL
1.4-DIOXANE (TRI Chemical ID: 000123911)	2006	Pounds	148.95	HOUSTON SHIP CHANNEL
2-ETHOXYETHANOL [TRI Chemical ID: 000110805]	2005	Pounds	479.8	HOUSTON SHIP CHANNEL
2-ETHOXYETHANOL (TRI Chemical ID: 000110805)	2004	Pounds		HOUSTON SHIP CHANNEL
2-ETHOXYETHANOL (TRI Chemical ID: 000110805)	2003	Pounds		HOUSTON SHIP CHANNEL
Z-ETHOXYETHANOL (TRI Chemical ID: 000110805)	2002	Pounds	5891.35	HOUSTON SHIP CHANNEL
2-ETHOXYETHANOL (TRI Chemical ID: 000110805)	2000	Pounds .	i l	HOUSTON SHIP CHANNEL
2-METHOXYETHÁNOL (TRI Chemical ID: 000109864)	2003	Pounds		HOUSTON SHIP CHANNEL
2-METHOXYETHANOL (TRI Chemical ID: 000109864)	2002	Pounds	!	HOUSTON SHIP CHANNEL
ACETONITRILE (TRI Chemical ID: 000075058)	2003	Pounds	1	HOUSTON SHIP CHANNEL
ACETONITRILE (TRI Chemical ID: 000075058)	2001	Pounds	750	HOUSTON SHIP CHANNEL
ACRYLIC ACID (TRI Chemical ID: 000079107)	2006	Pounds	2102	HOUSTON SHIP CHANNEL
ACRYLIC ACID (TRI Chemical ID: 000079107)	2005	Pounds		HOUSTON SHIP CHANNEL
ACRYLIC ACID (TRI Chemical ID: 000079107)	2004	Pounds		HOUSTON SHIP CHANNEL
ACRYLIC ACID (TRI Chemical ID: 000079107)	2003	Pounds	16229.1	HOUSTON SHIP CHANNEL
ACRYLIC ACID (TRI Chemical ID: 000079107)	2002	Pounds		HOUSTON SHIP CHANNEL
ACRYLONITRILE (TRI Chemical ID: 000107131)	2006	Pounds	39.8	HOUSTON SHIP CHANNEL
ACRYLONITRILE [TRI Chemical ID: 000107131)	2005	Pounds	1 5200	HOUSTON SHIP CHANNEL

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ACRYLONITRILE (TRI Chemical ID: 000107131)	2004	Pounds	20831	HOUSTON SHIP CHANNEL
ACRYLONITRILE (TRI Chemical ID: 000107131)	2003	Pounds		HOUSTON SHIP CHANNEL
ACRYLONITRILE (TRI Chemical ID; 000107131)	2002	Pounds	15741.2	HOUSTON SHIP CHANNEL
ACRYLONITRILE (TRI Chemical IO: 000107131)	2000	Pounds	. 5	HOUSTON SHIP CHANNEL
ALUMINUM (FUME OR DUST) (TRI Chemical ID: 007429905)	2003	Pounds		HOUSTON SHIP CHANNEL
ALUMINUM (FUME OR DUST) (TRI Chemical ID: 007429905)	2002	Pounds	2271.2	HOUSTON SHIP CHANNEL
ALUMINUM OXIDE (FIBROUS FORMS) (TRI Chemical ID: 001344281)	2004	Pounds	3268.6	HOUSTON SHIP. CHANNEL
AMMONIA (TRI Chemical ID: 007664417)	2005	Pounds		HOUSTON SHIP CHANNEL
AMMONIA (TRI Chemical ID: 007664417)	2004	Pounds		HOUSTON SHIP CHANNEL
AMMONIA (TRI Chemical ID: 007664417)	2003	Pounds	348	HOUSTON SHIP CHANNEL
AMMONIA (TRI Chemical ID: 007664417)	2002	Pounds	4222.25	HOUSTON SHIP CHANNEL
AMMONIA (TRI Chemical ID: 007664417)	2000	Pounds	1275	HOUSTON SHIP CHANNEL
AMMONIA (TRI Chemical ID: 007664417)	1999	Pounds	2055	HOUSTON SHIP CHANNEL
ANILAZINE (TRI Chemical ID: 000101053)	2004	Pounds	.1	HOUSTON SHIP CHANNEL
ANILINE (TRI Chemical ID: 000062533)	2003	Pounds	16.4	HOUSTON SHIP CHANNEL
ANILINE (TRI Chemical ID: 000062533)	2002	Pounds	499.55	HOUSTON SHIP CHANNEL
BENZENE (TR! Chemical ID: 000071432)	2005	Pounds	. 750	793.85
BENZENE (TRI Chemical ID: 000071432)	2008	Pounds	132	HOUSTON SHIP CHANNEL
BENZENE (TRI Chemical ID: 000071432)	2007	Pounds		HOUSTON SHIP CHANNEL
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BENZENE (TRI Chemical ID: 000071432)	2006	Pounds	132	HOUSTON SHIP CHANNEL
SENZENE (TRI Chemical ID: 000071432)	2003	Pounds	910.85	HOUSTON SHIP CHANNEL
BENZENE (TRI Chemical ID: 000071432)	2002	Pounds	151.25	HOUSTON SHIP CHANNEL
BUTYL ACRYLATE (TRI Chemical ID: 000141322)	2006	Pounds	- 2490	HOUSTON SHIP CHANNEL
BUTYL ACRYLATE (TRI Chemical ID: 000141322)	2005	Pounds	12725	HOUSTON SHIP CHANNEL
BUTYL ACRYLATE (TRI Chemical ID: 000141322)	2004	Pounds	11658	HOUSTON SHIP CHANNEL
BUTYL ACRYLATE (TRI Chemical ID: 000141322)	2003	Pounds	19059	HOUSTON SHIP CHANNEL
BUTYL ACRYLATE (TRI Chemical ID: 000141322)	2002	Pounds	20998.95	HOUSTON SHIP CHANNEL
CADMIUM (TRI Chemical ID: 007440439)	2006	Pounds .	13.25	HOUSTON SHIP CHANNEL
CHLORINE (TRI Chemical ID: 007782505)	2002	Pounds	141.45	HOUSTON SHIP CHANNEL
CHLOROBENZENE (TRI Chemicai ID: 000108907)	2005	Pounds	· 768	HOUSTON SHIP CHANNEL
CHLOROBENZENE (TRI Chemical ID: 000108907)	2004	Pounds	51.6	HOUSTON SHIP CHANNEL
CHLOROFORM (TRI Chemical ID: 000067663)	2005	Pounds	221	HOUSTON SHIP CHANNEL
CHLOROFORM (TRI Chemical ID: 000067663)	2004	Pounds		HOUSTON SHIP CHANNEL
CHLOROFORM (TRI Chemical ID: 000067663)	2003	Pounds	334.8	HOUSTON SHIP CHANNEL
CHROMIUM (TRI Chemical ID: 007440473)	2006	Pounds	981.55	HOUSTON SHIP CHANNEL
CHROMIUM (TRI Chemical ID: 007440473)	2004	Pounds	1531	HOUSTON SHIP CHANNEL
CHROMIUM (TRI Chemical ID: 007440473)	2003	Pounds	1962.5	HOUSTON SHIP CHANNEL
CHROMIUM (TRI Chemical ID: 007440473)	2002	Pounds	4720.1	HOUSTON SHIP CHANNEL
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CHROMIUM (TRI Chemical ID: 007440473)	2000	Pounds .	. 800	HOUSTON SHIP CHANNEL
COPPER (TRI Chemical ID: 007440508)	2003	Pounds	471.5	HOUSTON SHIP ICHANNEL
COPPER (TRI Chemical ID: 007440508)	2002	Pounds	1690.55	HOUSTON SHIP CHANNEL
CREOSOTE (TRI Chemical ID: 008001589)	2002	Pounds	487.6	HOUSTON SHIP CHANNEL
CRESOL (MIXED ISOMERS) (TRI Chemical ID: 001319773)	2000	Pounds		HOUSTON SHIP CHANNEL
CUMENE (TRI Chemical ID: 000098828)	2008	Pounds		HOUSTON SHIP CHANNEL
CUMENE (TRI Chemical ID: 000098828)	2007	Pounds	414.9	HOUSTON SHIP CHANNEL
CUMENE (TRI Chemical ID: 000098828)	2006	Pounds	414.9	HOUSTON SHIP CHANNEL
CUMENE (TRI Chemical ID: 000098828)	2005	Pounds	3389	HOUSTON SHIP CHANNEL
CUMENE (TRI Chemical ID: 000098828)	2004	Pounds	2230	HOUSTON SHIP CHANNEL
CUMENE (TRI Chemical ID: 000098828)	2003	Pounds	3092.4	HOUSTON SHIP CHANNEL
CUMENE HYDROPEROXIDE (TRI Chemical ID: 000080159)	2005	Pounds	1178	HOUSTON SHIP CHANNEL
CYCLOHEXANE (TRI Chemical ID: 000110827)	2008	Pounds	424.95	HOUSTON SHIP CHANNEL
CYCLOHEXANE (TRI Chemical ID: 000110827)	2007	Pounds	424.95	HOUSTON SHIP CHANNEL
CYCLOHEXANE (TRI Chemical ID: 000110827)	2006	Pounds	424.95	[CHANNEL
CYCLOHEXANE (TRI Chemical ID: 000110827)	2005	Pounds	2342	HOUSTON SHIP CHANNEL
CYCLOHEXANE (TRI Chemical ID: 000110827)	2004	Pounds	2356	HOUSTON SHIP CHANNEL
CYCLOHEXANE (TRI Chemical ID: 000110827)	2003	Pounds	4612	HOUSTON SHIP CHANNEL
CYCLOHEXANE (TRI Chemical ID: 009110827)	2002	Pounds	593.2	HOUSTON SHIP CHANNEL
	11	1		

CYCLOHEXANE ITRI Chemical ID: 000110827)	2001	Pounds	250	HOUSTON SHIP
CYCLOHEXANE (TRI Chemical ID: 000110827)	2000	Pounds	250	HOUSTON SHIP
CYCLOHEXANOL (TRI Chemical ID: 000108930)	2005	Pounds		HOUSTON SHIP CHANNEL
CYCLOHEXANOL (TRI Chemical ID: 000108930)	2004	Pounds		HOUSTON SHIP CHANNEL
CYCLOHEXANOL (TRI Chemical ID: 000108930)	2003	Pounds		HOUSTON SHIP CHANNEL
CYCLOHEXANOL (TRI Chemical ID: 000108930)	2000	Pounds	. 5	HOUSTON SHIP CHANNEL
DIAZINON (TRI Chemical ID: 000333415)	2006	Pounds	2278.15	HOUSTON SHIP CHANNEL
DIAZINON (TRI Chemical ID: 000333415)	2005	Pounds	5841	HOUSTON SHIP CHANNEL
DIAZINON (TRI Chemical ID: 000333415)	2004	Pounds	10281.9	HOUSTON SHIP CHANNEL
DIAZINON (TRI Chemical ID: 000333415)	2003	Pounds	1196.95	HOUSTON SHIP CHANNEL
DIAZINON (TRI Chemical ID: 000333415)	2002	Pounds	5164.35	HOUSTON SHIP CHANNEL
DIAZINON (TRI Chemical ID: 000333415)	2000	Pounds	1300	CHANNEL
DICHLOROMETHANE (TRI Chemical ID: 000075092)	2006	Pounds	298	HOUSTON SHIP CHANNEL
DICHLOROMETHANE (TRI Chemical ID: 000075092)	2005	Pounds	2230	HOUSTON SHIP CHANNEL
DICHLOROMETHANE (TRI Chemical ID: 000075092)	2004	Pounds	269	HOUSTON SHIP CHANNEL
DICHLOROMETHANE (TRI Chemical ID: 000075092)	2003	Pounds	137.7	HOUSTON SHIP CHANNEL
DICHLOROMETHANE (TRI Chemical ID: 000075092)	2002	Pounds	81.45	CHANNEL
DICHLOROMETHANE (TRI Chemical ID: 000075092)	2000	Pounds	250	HOUSTON SHIP CHANNEL
DICYCLOPENTADIENE (TRI Chemical ID: 000077736)	2005	Pounds	2352	HOUSTON SHIP CHANNEL
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DICYCLOPENTADIENE (TRI Chemical ID: 000077736)	2004	Pounds	3372.9	HOUSTON SHIP CHANNEL
DICYCLOPENTADIENE (TRI Chemical ID: 000077736)	2003	Pounds	3430.55	HOUSTON SHIP CHANNEL
DICYCLOPENTADIENE (TRI Chemical ID: 000077736)	2002	Pounds		HOUSTON SHIP CHANNEL
DICYCLOPENTADIENE (TRI Chemical ID: 000077736)	2001	Pounds		HOUSTON SHIP CHANNEL
DIETHANOLAMINE (TRI Chemical ID: 000111422)	2006	Pounds	. 2.8	HOUSTON SHIP CHANNEL
DIETHANOLAMINE (TRI Chemical ID: 000111422)	2005	Pounds		HOUSTON SHIP CHANNEL
DIETHANOLAMINE (TRI Chemical ID: 000111422)	2004	Pounds		HOUSTON SHIP CHANNEL
DIETHANOLAMINE (TRI Chemical ID: 000111422)	2003	Pounds		HOUSTON SHIP CHANNEL
DIETHANOLAMINE (TRI Chemical ID: 000111422)	2002	Pounds	7469.35	HOUSTON SHIP CHANNEL
DIMETHOATE (TRI Chemical ID: 000060515)	2004	Pounds	2610.05	HOUSTON SHIP CHANNEL
DIMETHOATE (TRI Chemical ID: 000060515)	2000	Pounds		HOUSTON SHIP CHANNEL
DIPHENYLAMINE (TRI Chemical ID: 000122394)	2003	Pounds		HOUSTON SHIP CHANNEL
EPICHLOROHYDRIN (TRI Chemical ID: 000106898)	2005	Pounds	-	HOUSTON SHIP CHANNEL
EPICHLOROHYDRIN (TRI Chemical ID: 000106898)	2003	Pounds		HOUSTON SHIP CHANNEL
ETHYL ACRYLATE (TRI Chemical ID: 000140885)	2006	Pounds		HOUSTON SHIP CHANNEL
ETHYLBENZENE (TRI Chemical ID: 000100414)	2008	Pounds		HOUSTON SHIP CHANNEL
ETHYLBENZENE (TRI Chemicai ID: 000100414)	2007	Pounds	250	HOUSTON SHIP CHANNEL
ETHYLBENZENE (TRI Chemical ID: 000100414)	2006	Pounds		HOUSTON SHIP CHANNEL:
ETHYLBENZENE (TRI Chemical ID: 000100414)	2005	Pounds	2268	HOUSTON SHIP CHANNEL
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ETHYLBENZENE (TRI Chemical ID: 000100414)	2004	Pounds	2510.05	HOUSTON SHIP CHANNEL
ETHYLBENZENE (TRI Chemical ID: 000100414)	2003	Pounds	5696.95	HOUSTON SHIP CHANNEL
ETHYLBENZENE (TRI Chemical ID: 000100414)	2002	Pounds ·	860.55	HOUSTON SHIP CHANNEL
ETHYLBENZENE (TRI Chemical ID: 000100414)	2000	Pounds	5	HOUSTON SHIP CHANNEL
ETHYLENE (TRI Chemical ID: 000074851)	2003	Pounds	1528.5	HOUSTON SHIP CHANNEL
ETHYLENE (TRI Chemical ID: 000074851)	2002	Pounds	1168.75	HOUSTON SHIP CHANNEL
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	2006	Pounds	3273.4	HOUSTON SHIP CHANNEL
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	2005	Pounds	12797	HOUSTON SHIP CHANNEL
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	2004	Pounds	13329.2	HOUSTON SHIP ICHANNEL
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	2003	Pounds	14/15.65	HOUSTON SHIP CHANNEL
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	2002	Pounds	16344.75	HOUSTON SHIP CHANNEL
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	2000	Pounds	25/0	CHANNEL
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	1999	Pounds	11	HOUSTON SHIP CHANNEL
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	1998	Pounds	750	HOUSTON SHIP CHANNEL
FORMALDEHYDE (TRI Chemical ID: 000050000)	2007	Pounds	, 8	HOUSTON SHIP CHANNEL
FORMALDEHYDE (TRI Chemical ID: 000050000)	2006	Pounds	· ·	HOUSTON SHIP CHANNEL
FORMALDEHYDE (TRI Chemical ID: 000050000)	2005	Pounds	16	HOUSTON SHIP CHANNEL
FORMALDEHYDE (TRI Chemical ID: 000050000)	2004	Pounds	li l	HOUSTON SHIP CHANNEL
FORMALDEHYDE (TRI Chemical ID: 000050000)	2003	Pounds	29.8	HOUSTON SHIP CHANNEL

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FORMALDEHYDE (TRI Chemical ID: 000050000)	2002	Pounds	3232.3	HOUSTON SHIP CHANNEL
FORMALDEHYDE (TRI Chemical ID: 000050000)	2001	Pounds		HOUSTON SHIP CHANNEL
FORMALDEHYDE (TRI Chemical ID: 000050000)	2000	Pounds		HOUSTON SHIP CHANNEL
FORMIC ACID (TRI Chemical ID: 000064186)	2002	Pounds	9.65	HOUSTON SHIP CHANNEL
HYDROCHLORIC ACID (1995 AND AFTER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007647010)	2003	Pounds		HOUSTON SHIP CHANNEL
HYDROCHLORIC ACID (1995 AND AFTER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007647010)	2002	Pounds		HOUSTON SHIP CHANNEL
HYDROGEN FLUORIDE (TRI Chemical ID: 007664393)	2003	Pounds		HOUSTON SHIP CHANNEL
HYDROGEN FLUORIDE (TRI Chemical ID: 007664393)	2002	Pounds	159.65	HOUSTON SHIP CHANNEL
ISOPROPYL ALCOHOL (MANUFACTURING.STRONG-ACID PROCESS ONLY.NO SUPPLIER) (TRI Chemical ID: 000067630)	2003	Pounds	606.75	HOUSTON SHIP CHANNEL
ISOPROPYL ALCOHOL (MANUFACTURING STRONG-ACID PROCESS ONLY NO SUPPLIER) (TRI Chemical ID: 000067630)	2002	Pounds	6266.25	HOUSTON SHIP CHANNEL
<u>LEAD</u> (TRI Chemical ID: 007439921)	2006	Pounds	430.15	HOUSTON SHIP CHANNEL
LEAD (TRI Chemical ID: 007439921)	2005	Pounds	207	HOUSTON SHIP CHANNEL
LEAD (TRI Chemical ID: 007439921)	2004	Pounds	607.25	HOUSTON SHIP CHANNEL
LEAD (TRI Chemical ID: 007439921)	2003	Pounds	442.1	HOUSTON SHIP CHANNEL
LEAD (TRI Chemical ID: 007439921)	2002	Pounds	1329.8	HOUSTON SHIP CHANNEL
M-XYLENE (TRI-Chemical ID: 000108383)	2005	Pounds	2185	LHANNEL
M-XYLENE (TRI Chemical ID: 000108383)	2004	Pounds	2144.15	HOUSTON SHIP CHANNEL
M-XYLENE (TRI Chemical ID: 000108383)	2003	Pounds	3011.25	HOUSTON SHIP CHANNEL

MALATHION (TRI Chemical ID: 000121755)	2006	Pounds	2278,18	HOUSTON SHIP CHANNEL
MALATHION (TRI Chemical ID: 000121755)	2005	Pounds		HOUSTON SHIP CHANNEL
MALATHION (TRI Chemical ID: 000121755)	2004	Pounds		HOUSTON SHIP CHANNEL
MALATHION (TRI Chemical ID: 000121755)	2003	Pounds		HOUSTON SHIP CHANNEL
MALATHION (TRI Chemical ID: 000121755)	2002	Pounds	51/0./	HOUSTON SHIP CHANNEL
MALATHION (TRI Chemical ID: 000121755)	2001	Pounds	250	HOUSTON SHIP CHANNEL
MALATHION (TRI Chemical ID: 000121755)	2000	Pounds	.5	HOUSTON SHIP CHANNEL
MALEIC ANHYDRIDE (TRI Chemical ID: 000108316)	2004	Pounds	2163.75	HOUSTON SHIP CHANNEL
MALEIC ANHYDRIDE (TRI Chemical ID: 000108316)	2003	Pounds	298.75	HOUSTON SHIP CHANNEL
MALEIC ANHYDRIDE (TRI Chemical ID: 000108316)	2002	Pounds	15.15	HOUSTON SHIP CHANNEL
MERCURY (TRI Chemical ID: 007439976)	2006	Pounds	4.4	HOUSTON SHIP CHANNEL
MERCURY (TRI Chemical ID: 007439976)	2005	Pounds		HOUSTON SHIP CHANNEL
MERCURY (TRI Chemical ID: 007439976)	2004	Pounds	8	HOUSTON SHIP CHANNEL
MERCURY (TRI Chemical ID: 007439976)	2003	Pounds	.6	HOUSTON SHIP CHANNEL
MERCURY (TRI Chemical ID: 007439976)	2002	Pounds		HOUSTON SHIP CHANNEL
METHANOL (TRI Chemical ID: 000067561)	2006	Pounds		HOUSTON SHIP CHANNEL
METHANOL (TRI Chemical ID: 000067561)	2005	Pounds	5451	HOUSTON SHIP CHANNEL
METHANOL (TRI Chemical ID: 000067561)	2004	Pounds		HOUSTON SHIP CHANNEL
METHANOL (TRI Chemical ID: 000067561)	2003	Pounds		HOUSTON SHIP CHANNEL
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METHANOL (TRI Chemical ID: 000067561)	2002	Pounds	42790,15	HOUSTON SHIP CHANNEL
METHANOL (TRI Chemical ID: 000067561)	2001	Pounds	250	HOUSTON SHIP CHANNEL
METHANOL (TRI Chemical ID: 000067561)	2000	Pounds	250	HOUSTON SHIP CHANNEL
METHANOL (TRI Chemical ID: 000067561)	1998	Pounds	1412	HOUSTON SHIP CHANNEL
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2003	Pounds		HOUSTON SHIP CHANNEL
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2002	Pounds	3255.5	HOUSTON SHIP CHANNEL
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2001	Pounds	· II	HOUSTON SHIP CHANNEL
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2001	Pounds	II	HOUSTON SHIP CHANNEL
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2000	Pounds		HOUSTON SHIP CHANNEL
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	. 2006	Pounds	406.85	HOUSTON SHIP CHANNEL
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2005	Pounds	2243	HOUSTON SHIP CHANNEL
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2004	Pounds	2249.95	HOUSTON SHIP CHANNEL
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2003	Pounds	31/6./5	HOUSTON SHIP CHANNEL
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2002	Pounds	11	HOUSTON SHIP CHANNEL
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2000	Pounds	250	HOUSTON SHIP CHANNEL
METHYL METHACRYLATE (TRI Chemical ID: 000080626)	2006	Pounds	395.75	CHANNEL
METHYL METHACRYLATE (TRI Chemical ID: 000080626)	2005	Pounds	4925	HOUSTON SHIP CHANNEL
METHYL METHACRYLATE (TRI Chemical ID: 000080626)	2004	Pounds	2145	HOUSTON SHIP CHANNEL
METHYL METHACRYLATE (TRI Chemical ID: 000080626)	2003	Pounds	3017.8	HOUSTON SHIP CHANNEL
girl district as occording		<u> </u>	1	()

METHYL METHACRYLATE (TRI Chemical ID: 000080626)	2000	Pounds	J <u></u>	HOUSTON SHIP
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	2005	Pounds .	J	HOUSTON SHIP CHANNEL
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	, 2004	Pounds	2144.15	HOUSTON SHIP CHANNEL
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	2003	Pounds	3012.55	HOUSTON SHIP CHANNEL
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	2002	Pounds	5217.05	HOUSTON SHIP CHANNEL
N.N-DIMETHYLFORMAMIDE (TRI Chemical ID: 000068122)	2004	Pounds	3.35	ICHANNEL
N.N-DIMETHYLFORMAMIDE (TRI Chemical ID: 000068122)	2003	Pounds	1.25	HOUSTON SHIP CHANNEL
N.N-DIMETHYLFORMAMIDE (TRI Chemical ID: 000068122)	2002	Pounds	467.5	HOUSTON SHIP CHANNEL
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	2006	Pounds	428.75	HOUSTON SHIP CHANNEL
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	2005	Pounds	2865	HOUSTON SHIP CHANNEL
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	2004	Pounds		HOUSTON SHIP CHANNEL
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	2003	Pounds	5283	HOUSTON SHIP CHANNEL
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	2002	Pounds	15165.75	HOUSTON SHIP CHANNEL
N-BIJTYL ALCOHOL (TRI Chemical ID: 000071363)	2001	Pounds	.230	HOUSTON SHIP CHANNEL
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	2000	Pounds	750	HOUSTON SHIP CHANNEL
N-HEXANE (TRI Chemical ID: 000110543)	. 2006	Pounds	1575.5	HOUSTON SHIP CHANNEL
N-HEXANE (TRI Chemical ID: 000110543)	2005	Pounds	3793	HOUSTON SHIP CHANNEL
N-HEXANE (TRI Chemica) ID: 000110543)	. 2004	Pounds	3803.9	HOUSTON SHIP CHANNEL
N-HEXANE (TRI Chemical ID: 000110543)		Pounds		HOUSTON SHIP CHANNEL

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2001			CHANNEL
2001	Pounds		HOUSTON SHIP CHANNEL
2003	Pounds	3066.8	HOUSTON SHIP CHANNEL
2006	Pounds	396.75	HOUSTON SHIP CHANNEL
2005	Pounds	2326	HOUSTON SHIP CHANNEL
2003	Pounds	3131.55	HOUSTON SHIP CHANNEL
2002	Pounds	786.55	HOUSTON SHIP CHANNEL
2003	Pounds	658.6	HOUSTON SHIP CHANNEL
2002	Pounds .	3931.6	HOUSTON SHIP CHANNEL
2000	Pounds .	1300	HOUSTON SHIP CHANNEL
2005	Pounds	445	HOUSTON SHIP CHANNEL
2004	Pounds	519.5	HOUSTON SHIP CHANNEL
2003	Pounds		HOUSTON SHIP CHANNEL
2002	Pounds	3910.15	HOUSTON SHIP CHANNEL
1998	Pounds	5	HOUSTON SHIP CHANNEL
2005	Pounds	2186	HOUSTON SHIP CHANNEL
2004	Pounds	2144.15	HOUSTON SHIP CHANNEL
2003	Pounds	3011.25	HOUSTON SHIP CHANNEL
2005	Pounds	201	HOUSTON SHIP CHANNEL
	2006 2005 2003 2002 2003 2002 2004 2003 2004 2005 2005 2004	2003 Pounds 2005 Pounds 2005 Pounds 2002 Pounds 2002 Pounds 2000 Pounds 2000 Pounds 2000 Pounds 2004 Pounds 2004 Pounds 2005 Pounds 2006 Pounds 2007 Pounds 2008 Pounds 2009 Pounds	2003 Pounds 3066.8

t.				
2HENOL (TRI Chemical ID: 000108952)	2003	Pounds	35.6	HOUSTON SHIP'
PHENOL (TRI Chemical ID: 000108952)	2002	Pounds	6093.3	HOUSTON SHIP CHANNEL
PHENOL (TRI Chemical ID: 000108952)	2000	Pounds	6000	HOUSTON SHIP CHANNEL
PHENOL (TRI Chemical ID: 000108952)	1998	Pounds	1027	HOUSTON SHIP CHANNEL
PHOSPHORIC ACID (TRI Chemical ID: 007664382)	1998	Pounds	830	HOUSTON SHIP CHANNEL
PHTHALIC ANHYDRIDE (TRI Chemical ID: 000085449)	2002	Pounds	104	ICHANNEL .
PYRIDINE (TRI Chemical ID: 000110861)	2003	Pounds	1.5	HOUSTON SHIP CHANNEL
PYRIDINE (TRI Chemical ID: 000110861)	2002	Pounds	363.25	HOUSTON SHIP CHANNEL
PYRIDINE (TRI Chemical ID: 000110861)	2000	Pounds		HOUSTON SHIP CHANNEL
SEC-BUTYL ALCOHOL (TRI Chemical ID: 000078922)	2005	Pounds	2197	HOUSTON SHIP CHANNEL
SEC-BUTYL ALCOHOL (TRI Chemical ID: 000078922)	2004	Pounds	2144.15	HOUSTON SHIP CHANNEL
<u>SEC-BUTYL ALCOHO:</u> (TRI Chemical ID: 000078922)	2003	Pounds	3011.25	HOUSTON SHIP CHANNEL
SEC-BUTYL ALCOHOL (TRI Chemical ID: 000078922)	2002	Pounds	182	HOUSTON SHIP CHANNEL
SODIUM NITRITE (TRI Chemical ID: 007632000)	2003	Pounds	678.35	HOUSTON SHIP CHANNEL
SODIUM NITRITE (TRI Chemical ID: 007632000)	2002	Pounds	972.3	HOUSTON SHIP CHANNEL
SODIUM NITRITE (TRI Chemical ID: 007632000)	1999	Pounds		HOUSTON SHIP CHANNEL
STYRENE (TRI Chemical ID: 000100425)	2006	Pounds	592.35	HOUSTON SHIP CHANNEL
STYRENE (TRI Chemical ID: 000100425)	2005	Pounds	3733	HOUSTON SHIP CHANNEL
STYRENE (TRI Chemical ID: 000100425)	2004	Pounds	3502.35	HOUSTON SHIP CHANNEL
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L.				
STYRENE (TRI Chemical ID: 000100425)	2003	Pounds		HOUSTON SHIP CHANNEL
STYRENE (TRI Chemical ID: 000100425)	2002	Pounds		HOUSTON SHIP CHANNEL
STYRENE (TRI Chemical ID: 000100425)	2001	Pounds		HOUSTON SHIP CHANNEL
STYRENE (TRI Chemical ID: 000100425)	2000	Pounds		HOUSTON SHIP CHANNEL
STYRENE (TRI Chemical ID: 000100425)	1998	Pounds	5	HOUSTON SHIP CHANNEL
SULFURIC ACID (1994 AND AFTER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007664939)	2003	Pounds		CHANNEL
SULFURIC ACID (1994 AND AFTER "ACID AEROSOLS" ONLY) (TR1 Chemical ID: 007664939)	2002	Pounds		HOUSTON SHIP CHANNEL
TERT-BUTYL ALCOHOL (TRI Chemical ID: 000075650)	2005	Pounds	2198	HOUSTON SHIP CHANNEL
TERT-BUTYL ALCOHOL (TRI Chemical ID: 000075650)	2004	Pounds		HOUSTON SHIP CHANNEL
TERT-BUTYL ALCOHOL (TRI Chemical ID: 000075650)	2003	Pounds	3059.3	HOUSTON SHIP CHANNEL
TERT-BUTYL ALCOHOL (TRI Chemical ID: 000075650)	2002	Pounds	149.6	HOUSTON SHIP CHANNEL
TETRACHLOROETHYLENE (TRI Chemical ID: 000127184)	2005	Pounds	2	HOUSTON SHIP CHANNEL
TOLUENE (TRI Chemical ID: 000108883)	2006	Pounds	896.1	HOUSTON SHIP CHANNEL
TOLUENE (TRI Chemical ID: 000108883)	2005	Pounds	2954	HOUSTON SHIP CHANNEL
TOLUENE (TRI Chemical ID: 000108883)	2004	Pounds	3630.85	HOUSTON SHIP CHANNEL
TOLUENE (TRI Chemical ID: 000108883)	2003	Pounds	5597.7	HOUSTON SHIP CHANNEL .
TOLUENE (TRI Chemical ID: 000108883)	2002	Pounds		HOUSTON SHIP CHANNEL
TOLUENE (TRI Chemical ID: 000108883)	2000	Pounds	250	HOUSTON SHIP CHANNEL
TRICHLOROETHYLENE (TRI Chemical ID: 000079016)	2005	Pounds	2	HOUSTON SHIP CHANNEL
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TRICHLOROETHMENE (TRI Chemica! ID: 000079016)	2004	Pounds		HOUSTON SHIP CHANNEL
TRICHLOROETHYLENE (TRI Chemical ID: 000079016)	2003	Pounds		HOUSTON SHIP CHANNEL
TRIETHYLAMINE (TRI Chemical ID: 000121448)	2004	Pounds		HOUSTON SHIP CHANNEL
IRIETHYLAMINE (TRI Chemical ID: 000121448)	2002	Pounds	603.55	HOUSTON SHIP CHANNEL
TRIETHYLAMINE (TRI Chemical ID: 000121448)	2000	Pounds	1810	HOUSTON SHIP CHANNEL
VINYL ACETATE (TRI Chemical ID: 000108054)	2006	Pounds	2633.65	HOUSTON SHIP CHANNEL
VINYL ACETATE (TRI Chemical ID: 000108054)	2003	Pounds	755.75	HOUSTON SHIP CHANNEL
VINYL ACETATE (TRI Chemical ID: 000108054)	2002	Pounds .	1752.75	HOUSTON SHIP CHANNEL
VINYL ACETATE (TRI Chemical ID: 000108054)	2001	Pounds	250	HOUSTON SHIP CHANNEL
VINYLIDENE CHLORIDE (TRI Chemical ID: 000075354)	1998	Pounds	250	HOUSTON SHIP CHANNEL
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2008	Pounds	250	HOUSTON SHIP CHANNEL
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2007	Pounds	250	HOUSTON SHIP CHANNEL
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2006	Pounds	2643.6	HOUSTON SHIP CHANNEL
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2005	Pounds	10268	HOUSTON SHIP CHANNEL
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2004	Pounds	10742.5	HOUSTON SHIP CHANNEL
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2003	Pounds	12995.5	HOUSTON SHIP CHANNEL
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2002	Pounds	16324.45	HOUSTON SHIP CHANNEL
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2001	Pounds	250	HOUSTON SHIP CHANNEL
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2000	Pounds	6280	HOUSTON SHIP CHANNEL

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Transfer of Chemicals to Off-Site Locations other than POTWs:

Please note that transfer amounts are not included in release totals shown above. For all releases estimated as a range, the mid-point of the range was used in these calculations. Rows with Total Transfer Amount equal to "0" were not listed.

Chemical Name	Year	Unit Of Measure	Total Transfer Amount	Transfer Site Name and Address	Type Of Waste Management
1.2-BUTYLENE OXIDE (TRI Chemical ID: 000106887)	2001	Pounds		TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
1,2-DICHLOROBENZENE (TRI Chemical ID: 000095501)	2006	Pounds	35117	CLEAN HARBORS LAPORTE 500 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Thermal Treatment
1.2-DICHLOROETHANE (TRI Chemical ID: 000107062)	2003	Pounds	44.21	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Energy Recovery
1.2-DICHLOROETHANE (TRI Chemical ID: 000107062)	2002	Pounds	34.54	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Energy Recovery
1.3-DICHLOROPROPYLENE (TRI Chemical ID: 000542756)	1998	Pounds	8465	TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
1.3-DICHLOROPROPYLENE (TRI Chemical ID: 000542756)	1998	Pounds	5644	SAFETY KLEEN 2027 BATLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
1.4-DICHLOROBENZENE (TRI Chemical ID: 000106467)	2000	Pounds	. 1824	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
1.4-DICHLOROBENZENE (TRI Chemical ID: 000106467)	2000	Pounds	5691	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Insignificant Fuel Value
1.4-DIOXANE (TRI Chemical ID: 000123911)	2001	Pounds	43060	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
2-5THOXYETHANOL (TRI Chemical ID: 000110805)	2005	Pounds	64.26	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Thermal Treatment
2-ETHOXYETHANOL (TRI Chemical ID: 000110805)	2004	Pounds	250	RINECO 1007 VULCAN ROAD	Incineration/Thermal Treatment

	1 1			BENTON, AR 72015	1
2-ETHOXYETHANOL (TRI Chemical ID: 000110805)	1999	Pounds	14842	TXI OPERATIONS	Energy Recovery
2-ETHOXYETHANOL (TRI Chemical ID: 000110805)	1999	Pounds	22262	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
2-ETHOXYETHANOL (TRI Chemical ID: 000110805)	1998	Pounds	8941	TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
<u>2-ETHOXYETHANOI</u> (TRI Chemical ID: 000110805)	1998	Pounds		SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
ACETONITRILE (TRI Chëmical ID: 000075058)	2001	Pounds	1000000	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
ACETONITRILE (TRI Chemical ID: 000075058)	1999	Pounds	. 8231	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
ACETONITRILE (TRI Chemical ID: 000075058)	1999	Pounds		TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
ACETONITRILE (TRI Chemical ID: 000075058)	1998	Pounds	5130	SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
ACETONITRILE (TRI Chemical ID: 000075058)	1998	Pounds .	7 6 96	TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
ACRYLIC ACID (TRI Chemical IQ: 000079107)	2003	Pounds	150	ONYX ENVIRONMENTAL SERVICES HIGHWAY 73 3.5 MI WEST OF TAYLORS BAYOU PORT ARTHUR, TX 77640	Incin eration/Insignificant Fuel Value
ACRYLIC ACID (TRI Chemical ID: 000079107)	1998	Pounds	5728	DISPOSAL SYS. INC. 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Underground Injection
ACRYLIC ACID (TRI Chemical ID: 000079107)	1998	Pounds	1718	CHEM WASTE MANAGEMENT HWY. 73 3.5 MI W. OF TAYLOR BAYOU PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
	1998	Pounds	1718	HAILOR DATOU	Incineration/Thermal Treatm

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ACRYLIC ACID (TRI Chemical ID: 000079107)	1998	Pounds	6874	SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Thermal Treatment
ACRYLIC ACID (TRI Chemical ID: 000079107)	1998	Pounds		SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
ACRYLIC ACID (TRI Chemical ID: 000079107)	1998	Pounds		TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
ACRYLONITRILE (TRI Chemical ID: 000107131)	2000	Pounds	32683	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
ACRYLONITRILE (TRI Chemical ID: 000107131)	2000	Pounds	23000	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
ACRYLONITRILE (TRI Chemical ID: 000107131)	1999	Pounds	20815	SAPETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
ACRYLONITRILE (TRI Chemical ID: 000107131)	1999	Pounds	31223	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
ACRYLONITRILE (TRI Chemical ID: 000107131)	1998	Pounds	9871	SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
ACRYLONITRILE (TRI Chemical ID: 000107131)	1998	Pounds		TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
ALLYL ALCOHOL (TRI Chemical ID: 000107186)	2003	Pounds	1132370	CLEAN HARBORS DEER PARK 2027 BATTLEGROUND RD LA PORTE, TX 775719808	Incineration/Insignificant Fuel Value
ALUMINUM OXIDE (FIBROUS FORMS) (TRI Chemical ID: 001344281)	2004	Pounds	68,85	ONYX ENVIRONMENTAL SERVICES HIGHWAY 73 3.5 MI WEST OF TAYLORS BAYOU PORT ARTHUR, TX 77640	Incin eration/Insignificant Fuel Value
ALUMINUM OXIDE (FIBROUS FORMS) (TRI Chemical ID: 001344281)	2004	Pounds	400.9	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incin eration/Insignificant Fuel Value
AMMONIA	2005	Pounds		TEXAS MOLËCULAR 2525 BATTLEGROUND ROAD	Underground Injection to Class I

(TRI Chemical ID: 007664417)			<u></u>	DEER PARK, TX 77536	Wells
AMMONIA (TRI Chemical ID: 007664417)	2005	Pounds	810133	NEWPARK INDUSTRIAL DISPOSAL 8300 PLEASURE ISLET RD. PORT ARTHUR, TX 77640	Underground Injection to Class I Wells
AMMONIA (TRI Chemical ID: 007664417)	2004	Pounds	73046	NEWPARK INDUSTRIAL DISPOSAL 8300 PLEASURE ISLET RD. PORT ARTHUR, TX 77640	Underground Injection to Class I Wells
AMMONIA (TRI Chemical ID: 007664417)	2004	Pounds	26632	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
AMMONIA (TRI Chemical ID: 007664417)	2003	Pounds	11445.6	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
AMMONIA (TRI Chemical ID: 007664417)	2003	Pounds	05340	NEWPARK INDUSTRIAL DISPOSAL 8300 PLEASURE ISLET RD. PORT ARTHUR, TX 77640	Underground Injection to Class I Wells
AMMONIA (TRI Chemical ID: 007664417)	2002	Pounds		TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection
AMMONIA (TRI Chemical ID: 007664417)	1999	Pounds		TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
AMMONIA (TRI Chemical ID: 007654417)	1999	Pounds	250	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Storage Only
ANILINE (TRI Chemical ID: 000062533)	2001	Pounds		SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Thermal Treatment
ANILINE (TRI Chemical ID: 000062533)	2000	Pounds	87970	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Thermal Treatment
ANILINE (TRI Chemical ID: 000062533)	1999	Pounds	17206	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
ANILINE (TRI Chemical ID: 000062533)	1999	Pounds		TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery

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ANILINE (TRI Chemical ID: 000062533)	1998	Pounds	10687	TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
ANILINE (TRI Chemical ID: 000062533)	1998	Pounds		SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2008	Pounds	99	CLEAN HARBORS LAPORTE 500 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2008	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2007	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2007	Pounds		CLEAN HARBORS LAPORTE 500 BATTLEGROUND RD: DEER PARK, TX 77536	Incineration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2006	Pounds		CLEAN HARBORS LAPORTE 500 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2006	Pounds	205096	ASH GROVE CEMENT FOREMAN 4454 HWY. 108 W. FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2006	Pounds	1069	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2005	Pounds	30	DUPONT ENVIRONMENTAL TREATMENT CHAMBERS WORKS ROUTE 130 DEEPWATER, NJ 08023	Wastewater Treatment (Excluding POTW)
BENZENE (TRI Chemical ID: 000071432)	2005	Pounds	7692	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Incineration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2005	Pounds		ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Incineration/Thermal Treatment
BENZENE	2005	Pounds	1739	RINECO 1007 VULCAN ROAD	Incineration/Thermal Treatment

(TRI Chemical ID: 000071432)	L			BENTON, AR 72015	
BENZENE (TRI Chemical ID: 000071432)	2005	Pounds			Underground Injection to Class I Wells
<u>BENŻENĖ</u> (TRI Chemical ID: 000071432)	2003	Pounds		CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX:77571	Incineration/Insignificant Fuel Value
BENZENE (TRI Chemical ID: 000071432)	2003	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2003	Pounds	419.7	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Insignificant Fuel Value
BENZENE (TRI Chemical ID: 000071432)	2003	Pounds	74.71	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2003	Pounds	350734.5	ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2002	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
BENZENE (TRI Chemical ID; 000071432)	2002	Pounds	166724.6	ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2002	Pounds		TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection
BENZENE (TRI Chemical ID: 000071432)	2002	Pounds		DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Energy Recovery
BUTYL ACRYLATE (TRI Chemical ID: 000141322)	2008	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Thermal Treatment
BUTYL ACRYLATE (TRI Chemical ID: 000141322)	2007	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Inclneration/Thermal Treatment
BUTYL ACRYLATE (TRI Chemical ID: 000141322)	2006	Pounds	14218	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Thermal Treatment

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BUTYL ACRYLATE (TRI Chemical ID: 000141322)	2004	Pounds	250	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Thermal Treatment
BUTYL ACRYLATE (TRI Chemical ID: 000141322)	1998	Pounds		SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
BUTYL ACRYLATE (TRI Chemical ID: 000141322)	1998	Pounds	10684	TXI 245 WARD RD. MIDLOTHIAN, TX 7.6065	Energy Recovery
CADMIUM (TRI Chemical ID: 007440439)	2006	Pounds	8.44	CLEAN HARBORS LAPORTE 500 BATTLEGROUND RD. DEER PARK, TX 77536	Other Off-Site Management
CHLOROBENZENE (TRI Chemical ID: 000108907)	2005	Pounds		RINECO 1007 VULCÁN ROAD BENTON, AR 72015	Incineration/Thermal Treatment
CHLOROBENZENE (TRI Chemical ID: 000108907)	2005	Pounds	3433	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Incineration/Thermal Treatment
CHLOROBENZENE (TRI Chemical ID: 000108907)	2004	Pounds	1028.05	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
CHLOROFORM (TRI Chemical ID: 000067663)	2005	Pounds	27498	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Energy Recovery
CHLOROFORM (TRI Chemical ID: 000067663)	2004	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Energy Recovery
CHROMIUM (TRI Chemical ID: 007440473)	2006	Pounds		CLEAN HARBORS LAPORTE 500 BATTLEGROUND RD. DEER PARK, TX 77536	Other Off-Site Management
CHROMIUM (TRI Chemical ID: 007440473)	2006	Pounds			Underground Injection to Class I Wells
CHROMIUM (TRI Chemical ID: 007440473).	2004	Pounds	16.57	CLEAN HARBORS DEER PARK 2027 BATTLEGROUND RD LA PORTE, TX 775719808	Other Off-Site Management
CHROMIUM (TRI Chemical ID: 007440473)	2004	Pounds	6681	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
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CHROMIUM (TRI Chemical ID: 007440473)	2003	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Other Off-Site Management
CHROMIUM (TRI Chemical ID: 007440473)	2003	Pounds		TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
CHROMIUM (TRI Chemical ID: 007440473)	2002	Pounds	21.11	WASTE MANAGEMENT INC. 7170 JOHN BRANNON ROAD SULPHUR, LA 70665	Transfer to Waste Broker-Disposal
CHROMIUM (TRI Chemical ID: 007440473)	1999	Pounds	10970	CHEMICAL WASTE MANAGEMENT 7170 JOHN BRANNON ROAD SULFUR, LA 70665	Landfill/Disposal Surface Impoundment
COPPER (TRI Chemical ID: 007440508)	2003	Pounds	1196.4	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
CRESOL (MIXED ISOMERS) (TRI Chemical ID: 001319773)	2000	Pounds	26565	CHEMICAL WASTE MANAGEMENT HWY 73, 3-1/2 MI. WEST OF TAYLOR BAYOU PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
CUMENE (TRI Chemical ID: 000098828)	2008	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Other Reuse or Recovery
CUMENE (TRI Chemical ID: 000098828)	2007	Pounds	1944	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Other Reuse or Recovery
CUMENE (TRI Chemical ID: 000098828)	2005	Pounds	1926	CLEAN HARBORS DEER PARK 2027 BATTLEGROUND RD LA PORTE, TX 775719808	Incineration/Thermal Treatment
CUMENE (TRI Chemical ID: 000098828)	2004	Pounds	45	ONYX ENVIRONMENTAL SERVICES HIGHWAY 73 3.5 MI WEST OF TAYLORS BAYOU PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
CUMENS (TRI Chemical ID: 000098828)	1998	Pounds	9556	TXI 245 WARD RD/ MIDLOTHIAN, TX 76065	Energy Recovery
CUMENE	1998	Pounds	6371	SAFETY KLEEN 2027 BATTLEGROUND RD.	Energy Recovery

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(TRI Chemical ID: 000098828)				DEER PARK, TX 77536	
CUMENE HYDROPEROXIDE (TRI Chemical ID: 000080159)	2005	Pounds	14045	VON ROLL AMERICA WTI 1250 SAINT GEORGE ST. EAST LIVERPOOL, OH 43920	Incineration/Thermal Treatment
CUMENE HYDROPEROXIDE (TRI Chemical ID: 000080159)	2005	Pounds		CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE; TX 77571	Incineration/Thermal Treatment
CYCLOHEXANE (TRI Chemical ID: 000110827)	2008	Pounds	2669		Transfer to Waste Broker-Energy Recovery
CYCLOHEXANE (TRI Chemical ID: 000110827)	2007	Pounds	3295	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
CYCLOHEXANE (TRI Chemical ID: 000110827)	2006	Pounds	9415.2	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
CYCLOHEXANE (TRI Chemical ID: 000110827)	2005	Pounds	2961	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Energy Recovery
CYCLOHEXANE (TRI Chemical ID: 000110827)	2004	Pounds	2961	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
CYCLOHEXANE (TRI Chemical ID: 000110827)	2003	Pounds	1343.2	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
CYCLOHEXANE (TRI Chemical ID: 000110827)	2001	Pounds	16300	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
CYCLOHEXANE (TRI Chemical ID: 000110827)	2000	Pounds	14193	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
CYCLOHEXANE (TRI Chemical ID: 000110827)	2000	Pounds	9462	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
CYCLOHEXANE (TRI Chemical ID: 000110827)	1999	Pounds	11218	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
CYCLOHEXANE (TRI Chemical ID: 000110827)	1999	Pounds		TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery

CYCLOHEXANOL (TRI Chemical ID: 000108930)	2000	Pounds	46050	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
CYCLOHEXANOL (TRI Chemical ID: 000108930)	2000	Pounds	30700	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
DIAMINOTOLUENE (MIXED ISOMERS) (TRI Chemical ID: 025376458)	1999	Pounds		CHEMICAL WASTE MANAGEMENT HWY 73, 3-1/2 MI. WEST OF TAYLOR BAYOU PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
DIAMINOTOLUENE (MIXED ISOMERS) (TRI Chemical ID: 025376458)	1999	Pounds	11566	CHEMICAL WASTE MANAGEMENT 7170 JOHN BRANNON ROAD SULFUR, LA 70665	Energy Recovery
DIAMINOTOLUENE (MIXED ISOMERS) (TRI Chemical ID: 025376458)	1999	Pounds	2472	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Thermal Treatment
DIAMINOTOLUENE (MIXED ISOMERS) (TRI Chemical ID: 025376458)	1999	Pounds	28076	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
DIAMINOTOLUENE (MIXED ISOMERS) (TRI Chemical ID: 025376458)	1999	Pounds		TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
DIAMINOTOLUENE (MIXED ISOMERS) (TRI Chemical ID: 025376458)	1999	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Thermal Treatment
DIAZINON (TRI Chemical ID: 000333415)	2004	Pounds	2875.44	VOPAK LOGISTICS SERVICES-PIEDMONT 305 SOUTH MAIN STREET MAULDIN, SC 29662	Transfer to Waste Broker-Energy Recovery
DIAZINON (TRI Chemical ID: 000333415)	2003	Pounds	1315.02	VOPAK INDÜSTRIAL SERVICES PIEDMONT 305 SOUTH MAIN STREET MAULDIN, SC 29662	Energy Recovery
<u>DICHLOROMETHANE</u> (TRI Chemical ID; 000075092)	2000	Pounds	18241	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Insignificant Fuel Value
DICYCLOPENTADIENE (TRI Chemical ID: 000077736)	2001	Pounds	21380	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery

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<u>DIETHANOLAMINE</u> (TRI Chemical ID: 000111422)	1998	Pounds	10096	TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
DIETHANOLAMINE (TRI Chemical ID: 000111422)	1998	Pounds		SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
DIMETHOATE (TRI Chemical ID: 000060515)	2004	Pounds .		RINECO 1007 VULCAN ROAD BENTON; AR 72015	Incineration/Insignificant Fuel Value
DIMETHOATE (TRI Chemical ID: 000060515)	2000	Pounds		SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
DIMETHOAIE (TRI Chemical ID: 000060515)	2000	Pounds		TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
EPICHLOROHYDRIN (TRI Chemica! ID: 000106898)	1998	Pounds		SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
EPICHLOROHYDRIN (TRI Chemical ID: 000105898)	1998	Pounds	8069	DISPOSAL SYS. INC. 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Underground Injection
EPICHLOROHYDRIN (TRI Chemical ID: 000106898)	1998	Pounds	4841	TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
ETHYLBENZENE (TRI Chemical ID: 000100414)	2008	Pounds	. 432	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Thermal Treatment
ETHYLBENZENE (TRI Chemical ID: 000100414)	2007	Pounds	250	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Thermal Treatment
ETHYLBENZENE (TRI Chemical ID: 000100414)	2007	Pounds	250	CLEAN HARBORS LAPORTE 500 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Thermal Treatment
ETHYLBENZENE (TRI Chemical ID: 000100414)	2006	Pounds	36117	CLEAN HARBORS LAPORTE 500 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Thermal Treatment
ETHYLBENZENE (TRI Chemical ID: 000100414)	2006	Pounds	996.48	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Thermai Treatment
ETHYLBENZENE				RINECO	

(TRI Chemical ID: 000100414)	2005	Pounds	957	1007 VULCAN ROAD BENTON, AR 72015	Incineration/Thermal Treatment
ETHYLBENZENE (TRI Chemical ID: 000100414)	2005	Pounds	143058	CLEAN HARBORS SOO BATTLEGROUND ROAD LA PORTE, TX 77571	Incineration/Thermal Treatment
ETHYLBENZENE (TRI Chemical ID: 000100414)	2004	Pounds	1032	ONYX ENVIRONMENTAL SERVICES HIGHWAY 73 3.5 MI WEST OF TAYLORS BAYOU PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
ETHYLBENZENE (TRI Chemical ID: 000100414)	2004	Pounds	78.24	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Thermal Treatment
ETHYLBENZENE (TRI Chemical ID: 000100414)	2003	Pounds		ONYX ENVIRONMENTAL SERVICES HIGHWAY 73 3.5 MI WEST OF TAYLORS BAYOU PORT ARTHUR, TX 77640	Incineration/Insignificant Fuel Value
ETHYLBENZENE (TRI Chemical ID: 000100414)	2001	Pounds		TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
ETHYLBENZENE (TRI Chemical ID: 000100414)	2000	Pounds	49140	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
ETHYLBENZENE (TRI Chemical ID: 000100414)	2000	Pounds	32760	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
ETHYLBENZENE (TRI Chemical ID: 000100414)	1999	Pounds	- 7325	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
ETHYLBENZENE (TRI Chemical ID: 000100414)	1999	Pounds		TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
ETHYLBENZENE (TRI Chemical ID: 000100414)	1999	Pounds	250	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Thermal Treatment
ETHYLENE (TRI Chemical ID: 000074851)	2001	Pounds	10930	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
ETHYLENE GLYCOL	2006	Pounds		CLEAN HARBORS LAPORTE 500 BATTLEGROUND RD.	Incineration/Thermal Treatment

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(TRI Chemical ID: 000107211)		· ·		DEER PARK, TX 77536	
THYLENE GLYCOL (TRI Chemical ID: 000107211)	2004	Pounds	3.6	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Incineration/Thermal Treatment
THYLENE GLYCOL (TRI Chemical ID: 000107211)	2004	Pounds	120432.88	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
ETHYLENE GLYCOL TRI Chemical ID: 000107211)	2004	Pounds		ONYX ENVIRONMENTAL SERVICES HIGHWAY 73 3.5 MI WEST OF TAYLORS BAYOU PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
THYLENE GLYCOL (TRI Chemical ID: 000107211)	1999	Pounds		SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Thermal Treatment
THYLENE GLYCOL (TRI Chemical ID: 000107211)	1999	Pounds		CHEMICAL WASTE MANAGEMENT HWY 73, 3-1/2 MI. WEST OF TAYLOR BAYOU PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
THYLENE GLYCOL (TRI Chemical ID: 000107211)	1998	Pounds		TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
ETHYLENE GLYCOL (TRI Chemical ID: 000107211)	1998	Pounds	17556	SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
FORMALDEHYDE (TRI Chemical ID: 000050000)	2001	Pounds	13900	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
FORMALDEHYDE (TRI Chemical ID: 000050000)	2001	Pounds	29200	CHEMICAL WASTE MANAGEMENT HWY 73, 3-1/2 MI. WEST OF TAYLOR BAYOU PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
FORMALDEHYDE (TRI Chemical ID: 000050000)	2000	Pounds	44800	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
FORMALDEHYDE (TRI Chemical ID: 000050000)	2000	Pounds	7965	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Thermal Treatment
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EORMAI DEHYDE (TRI Chemical ID: 000050000)	1999	Pounds	37986	245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
FORMALDEHYDE (TRI Chemical ID: 000050000)	1999	Pounds		SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
FORMALDEHYDE (TRI Chemical ID: 000050000)	1998	Pounds	32786	TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
FORMALDEHYDE (TRI Chemical ID: 000050000)	1998	Pounds	13809	SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
FORMALDEHYDE (TRI Chemical ID: 000050000)	1998	Pounds	250	CHEM WASTE MANAGEMENT 7170 JOHN BRANNON RD. SULPHUR, LA 70665	Landfill/Disposal Surface Impoundment
HYDROCHLORIC ACID (1995 AND AFTER "ACID AEROSOLS" ONLY! (TRI Chemical ID: 007647010)	2003	Pounds	10659.6	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
HYDROCHLORIC ACID (1995 AND AFTER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007647010)	2003	Pounds	28	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Incineration/Insignificant Fuel Value
HYDROCHLORIC ACID (1995 AND AFTER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007647010)	2002	Pounds		TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection
HYDROGEN FLUORIDE (TRI Chemical ID: 007664393)	1999	Pounds		DISPOSAL SYSTEMS INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection
ISOPROPYL ALCOHOL (MANUFACTURING.STRONG-ACID PROCESS ONLY.NO. SUPPLIER) (TRI Chemical ID: 000067630)	2002	Pounds	33	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incheration/Insignificant Fuel Value
LEAD (TRI Chemical ID: 007439921)	2006	Pounds	7.18	ONYX ENVIRONMENTAL HWY 73 3.5 MILES W. OF TAYLORS BAYOU PORT ARTHUR, TX 77640	Other Off-Site Management
L <u>EAD</u> (TRI Chemical ID: 007439921)	2006	Pounds	9.88	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
LEAD (TRI Chemical ID: 007439921)	2006	Pounds	2.67	CLEAN HARBORS LAPORTE 500 BATTLEGROUND RD. DEER PARK, TX 77536	Other Off-Site Management
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LEAD (TRI Chemical ID: 007439921)	2005	Pounds	70	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Other Off-Site Management
L <u>EAD</u> (TRI Chemical ID: 007439921)	2005	Pounds	4535	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Other Off-Site Management
L <u>EAD</u> (TRI Chemical ID: 007439921)	2005	Pounds		TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
<u>LEAD</u> (TRI Chemkal ID: 007439921)	2005	Pounds	10	ONYX ENVIRONMENTAL SERVICES HIGHWAY 73 3.5 MI WEST OF TAYLORS BAYOU PORT ARTHUR, TX 77640	Other Off-Site Management
LEAD (TRI Chemical ID: 007439921)	2005	Pounds	4580	TEXAS ECOLOGISTS PETRONILA ROAD 3.5 MILES SOUTH OF ROBSTOWN ROBSTOWN, TX 78380	Solidification/Stabilization-Metals and Metal Compounds only
<u>LEAD</u> (TRI Chemical ID: 007439921)	2004	Pounds	120432	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
<u>LEAD</u> (TRI Chemical ID: 007439921)	2003	Pounds	1225.4	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
LEAD (TRI Chemical ID: 007439921)	2003	Pounds	151.45	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Other Off-Site Management
LEAD (TRI Chemical ID: 007439921)	2002	Pounds	31.66	WASTE MANAGEMENT INC. 7170 JOHN BRANNON ROAD SULPHUR, LA 70665	Transfer to Waste Broker-Disposal
L <u>EAD</u> (TRI Chemical ID: 007439921)	2002	Pounds	59897.04	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection
LE <u>AD</u> (TRI Chemical ID: 007439921)	1999	Pounds	14502	CHEMICAL WASTE MANAGEMENT 7170 JOHN BRANNON ROAD SULFUR, LA 70665	Landfill/Disposal Surface Impoundment
MALATHION (TRI Chemical ID: 000121755)	2004	Pounds	28752.44	VOPAK LOGISTICS SERVICES PIEDMONT 305 SOUTH MAIN STREET MAULDIN, SC 29662	Energy Recovery

MALATHION (TRI Chemical ID: 000121755)	2003	Pounds	1315.02	VOPAK INDUSTRIAL SERVICES PIEDMONT 305 SOUTH MAIN STREET MAULDIN, SC 29662	Energy Recovery
MALATHION (TRI Chemical ID: 000121755)	2001	Pounds		TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
MALATHION (TRI Chemical ID: 000121755)	2000	Pounds		SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
MERCURY (TRI Chemical ID: 007439976) .	2006	Pounds	52.11	CLEAN HARBORS LAPORTE 500 BATTLEGROUND RD. DEER PARK, TX 77536	Other Off-Site Management
MERCURY (TRI Chemical ID: 007439976)	2005	Pounds		CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Other Off-Site Management
MERCURY (TRI Chemical ID: 007439976)	2005	Pounds	32	LAMP RECYCERS OF LOUISIANA INC 46257 MORRIS RD. HAMMOND, LA 70401	Metals Recovery
MERCURY (TRI Chemical ID: 007439976)	2004	Pounds	202.79	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Other Off-Site Management
MERCURY (TRI Chemical ID: 007439976)	2004	Pounds	130.32	LAMP RECYCERS OF LOUISIANA INC 46257 MORRIS RD, HAMMOND, LA 70401	Metals Recovery
MERCURY (TRI Chemical 1D: 007439976)	2003	Pounds	5.5	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Other Off-Site Management
METHANOL (TRI Chemical ID: 000067561)	2008	Pounds	39101	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
METHANOL (TRI Chemical ID: 000067561)	2007	Pounds	68220	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
METHANOL (TRI Chemical ID: 000067561)	2006	Pounds	20230	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
METHANOL .	2006	Pounds		CLEAN HARBORS LAPORTE 500 BATTLEGROUND RD.	Incineration/Thermal Treatment

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(TRI Chemical ID: 000067561)				DEER PARK, TX 77536	
METHANOL (TRI Chemical ID: 000067561)	2006	Pounds	9415.2	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
METHANOL (TRI Chemical ID: 000067561)	2006	Pounds	1640772	ASH GROVE CEMENT FOREMAN 4454 HWY. 108 W. FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
METHANOL (TRI Chemical ID: 000067561)	2006	Pounds		ENERGIS LLC 15215 DAY RD. DUNDEE, MI 48131	Transfer to Waste Broker-Energy Recovery
METHANOL (TRI Chemical ID: 000067561)	2005	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Insignificant Fuel Value
METHANOL (TRI Chemical ID: 000067561)	2005	Pounds	2520108	ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
METHANOL (TRI Chemical ID: 000067561)	2005	Pounds	143058	CLEAN HARBORS DEER PARK 2027 BATTLEGROUND RD LA PORTE, TX 775719808	Incineration/Thermal Treatment
METHANOL (TRI Chemical ID: 000067561)	2005	Pounds		TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
METHANOL (TRI Chemical ID: 000067561)	2004	Pounds	5298.6	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Insignificant Fuel Value
METHANOL (TRI Chemical ID: 000067561)	2004	Pounds		TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
METHANOL (TRI Chemical ID: 000067561)	2004	Pounds	226993.4	ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
METHANOL (TRI Chemical ID: 000067561)	2003	Pounds	1343.2	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
METHANOL (TRI Chemical ID: 000067561)	2003	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Insignificant Fuel Value
METHANOL				ASH GROVE CEMENT	Transfer to Waste Broker-Energy

(TRI Chemical ID: 000067561)	2003	Pounds		4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Recovery
METHANOL (TRI Chemical ID: 000067561)	2003	Pounds		TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
METHANOL (TRI Chemical ID: 000067561)	2002	Pounds	17729.2	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection
METHANOL (TRI Chemical ID: 000067561)	2002	Pounds	1333796.8	ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
METHANOL (TRI Chemical ID: 000067561)	2001	Pounds		SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Thermal Treatment
METHANOL (TRI Chemical ID: 000067561)	2001	Pounds	697500	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
METHANOL (TRI Chemical ID: 000067561)	2000	Pounds	304635	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Елегду Recovery
METHANOL (TRI Chemical ID: 000067561)	2000	Pounds	250	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Thermal Treatment
METHANOL (TRI Chemical ID: 000067561)	2000	Pounds	456953	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
METHANOL (TRI Chemical ID: 000067561)	1999	Pounds		Safety Kleen 2027 Battleground Road Deer Park, TX 77536	Energy Recovery
METHANOL (TRI Chemical ID: 000067561)	1999	Pounds	649569	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
METHANOL (TRI Chemical ID: 000067561)	1999	Pounds		SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Thermal Treatment
METHANOL (TRI Chemical ID: 000067561)	1998	Pounds	68341	TXI 245 WARD RD, MIDLOTHIAN, TX 76065	Energy Recovery
METHANOL (TRI Chemical ID: 000067561)	1998	Pounds	45561	SAFETY KLEEN 2027 BATTLEGROUND RD.	Energy Recovery

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		ĺ	1 1	DEER PARK, TX 77536	
METHANOL (TRI Chemical ID: 000067561)	1998	Pounds	5	CHEM WASTE MANAGEMENT 7170 JOHN BRANNON RD. SULPHUR, LA 70665	Landfiil/Disposal Surface Impoundment
METHOXYCHLOR (TRI Chemical ID: 000072435)	2005	Pounds	1300	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Energy Recovery
METHOXYCHLOR (TRI Chemical ID: 000072435)	2002	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2003	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Insignificant Fuel Value
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2003	Pounds		ONYX ENVIRONMENTAL SERVICES HIGHWAY 73 3.5 MI WEST OF TAYLORS BAYOU PORT ARTHUR, TX 77640	Incineration/Insignificant Fuel Value
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2001	Pounds		TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2000	Pounds		TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
METHYL ETHYL KETONE (TRI Chemica) ID: 000078933)	2000	Pounds	36958	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	1999	Pounds	30016	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	1999	Pounds	20010	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2008	Pounds 		RINECO 1007 VULCAN ROĄD BENTON, AR 72015	Incineration/Therma! Treatment
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2007	Pounds	15173	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Thermal Treatment
METHYL ISOBUTYL KETONE				CLEAN HARBORS LAPORTE	

(TRI Chemical ID: 000108101)	2005	Pounds	3511.7	500 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Thermal Treatment
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2005	Pounds		CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Incineration/Thermal Treatment
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2000	Pounds	9940	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Insignificant Fuel Value
METHYL METHACRYLATE (TRI Chemical ID: 000080626)	2007	Pounds	398	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Other Reuse or Recovery
METHYL METHACRYLATE (TRI Chemical ID: 000080626)	2000	Pounds	250	CHEMICAL WASTE MANAGEMENT 7170 JOHN BRANNON ROAD SULFUR, LA 70665	Landfill/Disposal Surface Impoundment
METHYL METHACRYLATE (TRI Chemicai ID: 000080626)	2000	Pounds	41281	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
METHYL METHACRYLATE (TRI Chemical ID: 000080626)	1999	Pounds	14366	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	2005	Pounds		CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Incineration/Thermal Treatment
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	2000	Pounds	168798	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	2000	Pounds		SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	1999	Pounds	68950	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	1998	Pounds	55887	SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	1998	Pounds	83831	TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
N.N-DIMETHYLFORMAMIDE				TXI OPERATIONS	

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(TRI Chemical ID: 000068122)	2001	Pounds .	144000	245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
N.N-DIMETHYLFORMAMIDE (TRI Chemical ID: 000068122)	2000	Pounds	46400	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 7606S	Energy Recovery
N.N-DIMETHYLFORMAMIDE (TRI Chemical ID: 00006B122)	2000	Pounds		SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	2008	Pounds	203	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	2005	Pounds	123	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Insignificant Fuel Value
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	2004	Pounds	250	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Insignificant Fuel Value
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	2001	Pounds	32000	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
N-BUTY: ALCOHOL (TR1 Chemical ID: 000071363)	2000	Pounds	43457	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	2000	Pounds	28971	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	1999	Pounds	77753	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	1999	Pounds	51836	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	1998	Pounds	41209	TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
N-BUTYL A! COHO! (TRI Chemical ID: 000071363)	1998	Pounds	27472	SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	1998	Pounds	250	CHEM WASTE MANAGEMENT 7170 JOHN BRANNON RD.	Energy Recovery

1 . 1		1	SULPHUR, LA 70655)
2006	Pounds	2446.5		Incineration/Thermal Treatment
2005	Pounds	7081.4	1007 VULCAN ROAD	Transfer to Waste Broker-Energy Recovery
2005	Pounds			Energy Recovery
2005	Pounds	2359	SERVICES HIGHWAY 73 3.5 MI WEST OF TAYLORS BAYOU	Incineration/Thermal Treatment
2003	Pounds	1007.4	1007 VULCAN ROAD	Transfer to Waste Broker-Energy Recovery
2001	Pounds			Energy Recovery
2000	Pounds		245 WARD ROAD	Energy Recovery
2000	Pounds		2027 BATTLEGROUND ROAD	Energy Recovery
1999	Pounds	42030	245 WARD ROAD	Energy Recovery
1998	Pounds	5		Landfill/Disposal Surface Impoundment
1998	Pounds	11970	2027 BATTLEGROUND RD.	Energy Recovery
1999	Pounds	12800		Energy Recovery
	2005 2005 2003 2001 2000 2000 1999 1998	2006 Pounds 2006 Pounds 2005 Pounds 2005 Pounds 2003 Pounds 2001 Pounds 2000 Pounds 2000 Pounds 1999 Pounds 1998 Pounds 1998 Pounds	2006 Pounds 2446.5	17 17 17 17 17 17 17 17

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NAPHTHALENE (TRI Chemical ID: 000091203)	2008	Pounds	10865	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
NAPHTHALENE (TRI Chemical ID: 000091203)	2007	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
NAPHTHALENE (TRI Chemical ID: 000091203)	2006	Pounds	2.2	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
NAPHTHALENE (TRI Chemical ID: 000091203)	2006	Pounds	26.16	CLEAN HARBORS LAPORTE 500 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Thermal Treatment
NAPHTHALENE (TRI Chemical ID: 000091203)	2005	Pounds	439	CLEAN HARBORS DEER PARK 2027 BATTLEGROUND RD LA PORTE, TX 775719808	Incineration/Thermal Treatment
NAPHTHALENE (TRI Chemical ID: 000091203)	2005	Pounds	2	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Energy Recovery
<u>NAPHTHALENE</u> (TRI Chemical ID: 000091203)	2003	Pounds	11.36	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Incineration/Insignificant Fuel Value
NICKEL (TRI Chemical ID: 007440020)	2003	Pounds		TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
NICKEL (TRI Chemical ID: 007440020)	2003	Pounds	769.41	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Other Off-Site Management
NICKEL (TRI Chemical ID: 007440020)	2002	Pounds		WASTE MANAGEMENT INC. 7170 JOHN BRANNON ROAD SULPHUR, LA 70665	Transfer to Waste Broker-Disposal
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2000	Pounds	66224	CHEMICAL WASTE MANAGEMENT 7170 JOHN BRANNON ROAD SULFUR, LA 70665	Soildification/Stabilization-Metals and Metal Compounds only
NITRIC ACID (TRI Chemical ID: 007697372)	2005	Pounds	. 34637	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
NITRIC ACID	2005	Pounds		ONYX ENVIRONMENTAL SERVICES HIGHWAY 73 3.5 MI WEST	Incineration/Thermal Treatment

(TRI Chemical ID: 007697372)				OF TAYLORS BAYOU PORT ARTHUR, TX 77640	
NITRIC ACID (TRI Chemical ID: 007697372)	2005	Pounds	2465	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Wastewater Treatment (Excluding POTW)
NITRIC ACID (TRI Chemical ID: 007697372)	2005	Pounds	. 22516	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	incineration/Thermal Treatment
NITRIC ACID (TRI Chemical ID: 007597372)	2004	Pounds	15398.4	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
NITRIC ACID (TRI Chemical ID: 007697372)	2004	Pounds	- 2024	CLEAN HARBOR5 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Wastewater Treatment (Excluding POTW)
NITRIC ACID (TRI Chemical ID: 007697372)	2004	Pounds	2749.74	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Inclneration/Insignificant Fuel Value
NITRIC ACID (TRI Chemical ID: 007697372)	2004	Pounds	21.34	ONYX ENVIRONMENTAL SERVICES HIGHWAY 73 3.5 MI WEST OF TAYLORS BAYOU PORT ARTHUR, TX 77640	Incineration/Insignificant Fuel Value
NITRIC ACID (TR1 Chemical ID: 007697372)	2003	Pounds	420	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Incineration/Insignificant Fuel Value
NITRIC ACID (TRI Chemical ID: 007697372)	2003	Pounds	7284	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
<u>NITRIĆ ACID</u> (TRI Chemical ID: 007697372)	2001	Pounds	187100	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection
NITRIC ACID (TRI Chemical ID: 007697372)	1999	Pounds	148167	DISPOSAL SYSTEMS INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection
NITRIC ACID (TRI Chemical ID: 007697372)	1998	Pounds	11848	CHEM WASTE MANAGEMENT 7170 JOHN BRANNON RD. SULPHUR, LA 70665	Solidification/Stabilization
NITRIC ACID (TRI Chemical ID: 007697372)	1998	Pounds	11848	CHEM WASTE MANAGEMENT 7170 JOHN BRANNON RD. SULPHUR, LA 70665	Landfil/Disposal Surface Impoundment
NITRIC ACID	1998	Pounds	. 11848	CHEM WASTE MANAGEMENT 7170 JOHN BRANNON RD.	

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NITRIC ACID (TRI Chemical ID: 007697372)	1998	Pounds	3385	DISPOSAL SYS. INC. 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Underground Injection
NITROBENZENE (TRI Chemical In: D00098953)	2000	Pounds	13295	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
NITROBENZENE (TRI Chemical ID: 000098953)	1999	Pounds		SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
PHENOL (TRI Chemical ID: 000108952)	2005	Pounds	114447	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Incineration/Thermal Treatment
PHENOL (TRI Chemical ID: 000108952)	2005	Pounds	321	CLEAN HARBORS DEER PARK 2027 BATTLEGROUND RD LA PORTE, TX 775719808	Incineration/Thermal Treatment
PHENOL (TRI Chemical ID: 000108952)	2005	Pounds	43200	SYSTECH ENVIRONMENTAL 1420 SOUTH CEMENT RD. FREDONIA, KS 66736	Energy Recovery
PHENOL (TRI Chemical ID: 000108952)	2003	Pounds	20196.4	LIQUID ENVIRONMENTAL SOLUTIONS 250 GELHORN HOUSTON, TX 77013	Wastewater Treatment (Excluding POTW)
<u>PHENO!</u> (TRI Chemical ID: 000108952)	2002	Pounds	16174.66	LIQUID ENVIRONMENTAL SOLUTIONS 250 GELHORN HOUSTON, TX 77013	Wastewater Treatment (Excluding POTW)
PHENOL (TRI Chemical ID: 000108952)	2000	Pounds		SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Insignificant Fuel Value
PHENOL (TRI Chemical ID: 000108952)	1998	Pounds	30576	DISPOSAL SYS. INC. 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
PHENOL (TRI Chemical ID: 000108952)	1998	Pounds	20384	TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
PHENOL (TRI Chemical ID: 000108952)	1998	Pounds	63701	SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
PHOSPHORIC ACID	1998	Pounds	250	ITXI 245 WARD RD.	Energy Recovery

(TRI Chemical ID: 007664382)		L		MIDLOTHIAN, TX 76065	· :.
PHOSPHORIC ACID (TRI Chemical ID: 007664382)	1998	Pounds	250	SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
PHOSPHORIC ACID (TRI Chemical ID: 007664382)	1998	Pounds		DISPOSAL SYS. INC. 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Underground Injection
PYRIDINE (TRI Chemical ID: 000110861)	2005	Pounds	23	RINEGO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Thermal Treatment
PYRIDINE (TRI Chemical ID: 000110861)	2005	Pounds		ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Energy Recovery
PYRIDINE (TRI Chemical ID: 000110861)	2003	Pounds		ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
PYRIDINE (TRI Chemical ID: 000110861)	2002	Pounds		ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
SEC-BUTYL ALCOHOL (TRI Chemical ID: 000078922)	2001	Pounds		TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
SODIUM NITRITE (TRI Chemical ID: 007632000)	2003	Pounds	99.4	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Incineration/Insignificant Fuel Value
SODIUM NITRITE (TRI Chemical ID: 007632000)	2002	Pounds	. 1600	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Incineration/Insignificant Fuel Value
SODIUM NITRITE (TRI Chemical ID: 007632000)	2002	Pounds	59.88	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Insignificant Fuel Value
STYRENE (TRI Chemical ID: 000100425)	2008	Pounds	35906	ASH GROVE CEMENT FOREMAN 4454 HWY. 108 W, FOREMAN, AR 71836	Transfer to Waste Broker÷Energy Recovery
STYRENE (TRI Chemical ID: 000100425)	2007	Pounds		ASH GROVE CEMENT FOREMAN 4454 HWY. 108 W. FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
STYRENE				CLEAN HARBORS LAPORTE	

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(TRI Chemical ID: 000100425)	2006	Pounds	35117	S00 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Thermal Treatment
STYRENE (TRI Chemical ID: 000100425)	2006	Pounds	1230579	ASH GROVE CEMENT FOREMAN 4454 HWY. 108 W. FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
STYRENE (TRI Chemical ID: 000100425)	2005	Pounds	143058	CLEAN HARBORS DEER PARK 2027 BATTLEGROUND RD LA PORTE, TX 775719808	Incineration/Thermal Treatment
STYRENE (TRI Chemical ID: 000100425)	2005	Pounds		ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
STYRENE (TRI Chemical ID: 000100425)	2004	Pounds	1702449.3	ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
STYRENE (TRI Chemical ID: 000100425)	2003	Pounds		ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
STYRENE (TRI Chemical ID: 000100425)	2002	Pounds	1000347.6	ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
STYRENE (TRI Chemical ID: 000100425)	20ò1	Pounds	28000	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
STYRENE (TRI Chemical ID: 000100425)	2000	Pounds	24300	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
STYRENE (TRI Chemical ID: 000100425)	1999	Pounds	37222	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
STYRENE (TRI Chemical ID: 000100425)	1998	Pounds	1153	DISPOSAL SYS. INC. 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Underground Injection
STYRENE (TRI Chemical ID: 000100425)	1998	Pounds	6227	TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
STYRENE (TRI Chemical ID: 000100425)	. 1998	Pounds	4152	SAFETY KLEEN 2027 BATTLEGROUND RD, DEER PARK, TX 77536	Energy Recovery
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SULFURIC ACID (1994 AND AFTER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007664939)	2003	Pounds		TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection to Class I Wells
SULFURIC ACID (1994 AND AFTER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007664939)	2002	Pounds	39006	TEXAS MOLECULAR 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection
TERT-BUTYL ALCOHOL (TRI Chemical ID: 000075650)	2001	Pounds	17300	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
TETRACHLOROETHYLENE (TRI Chemical ID: 000127184)	2005	Pounds	2861	CLEAN HARBORS DEER PARK 2027 BATTLEGROUND RD LA PORTE, TX 775719808	Incineration/Thermal Treatment
TOLUENE (TRI Chemical ID: 000108883)	2008	Pounds	13035	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2007	Pounds	22748	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2006	Pounds	35117	CLEAN HARBORS LAPORTE 500 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Thermal Treatment
TOLUENE (TRI Chemical ID: 000108883)	2006	Pounds	1640772		Transfer to Waste Broker-Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2006	Pounds			Transfer to Waste Broker-Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2005	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Indineration/Thermal Treatment
TOLUENE (TRI Chemical ID: 000108883)	2005	Pounds		ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2005	Pounds		CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Incineration/Thermal Treatment
TOLUENE	2005	Pounds	11964	ONYX ENVIRONMENTAL SERVICES HIGHWAY 73 3.5 MI WEST	Incineration/Thermal Treatment

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(TRI Chemical ID: 000108883)				OF TAYLORS BAYOU PORT ARTHUR, TX 77640	
TOLUENE (TRI Chemical ID: 000108883)	2004	Pounds	6646.6	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2004	Pounds		ONYX ENVIRONMENTAL SERVICES HIGHWAY 73 3.5 MI WEST OF TAYLORS BAYOU PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
TOLUENE (TRI Chemical ID: 000108883)	2004	Pounds	2269932.4	ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2003	Pounds	37.04	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Insignificant Fuel Value
TOLUENE (TRI Chemical ID: 000108883)	2003	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2003	Pounds	2805876	ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	200,3	Pounds	13322	CLEAN HARBORS DEER PARK 2027 BATTLEGROUND RD LA PORTE, TX 775719808	Incineration/Insignificant Fuel Value
TOLUENE (TRI Chemical ID: 000108883)	2002	Pounds	1333796.8	ASH GROVE CEMENT 4454 HIGHWAY 108 WEST FOREMAN, AR 71836	Transfer to Waste Broker-Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2001	Pounds	510500	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2000	Pounds	283000	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	1999	Pounds	133240	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	1998	Pounds	6564	SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery

TOLUENE (TRI Chemical ID: 000108883)	1998	Pounds	9847	TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
TOLUENE DIISOCYANATE (MIXED ISOMERS) (TRI Chemical ID: 026471625)	2006	Pounds		CLEAN HARBORS LAPORTE 500 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Therma! Treatment
TOLUENE DIISOCYANATE (MIXED ISOMERS) (TRI Chemical ID: 026471625)	2004	Pounds	16.5	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Incineration/Insignificant Fuel Value
TOXAPHENE (TRI Chemical ID: 008001352)	2002	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
TRICHLOROETHYLENE (TRI Chemical ID: 000079016)	2005	Pounds	2861	CLEAN HARBORS 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Incineration/Thermal Treatment
TRICHLOROETHYLENE (TRI Chemical ID: 000079016)	2003	Pounds	26.16	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Energy Recovery
VINYL ACETATE (TRI Chemical ID: 000108054)	2008	Pounds	2583	ONYX ENVIRONMENTAL HWY 73 3.5 MILES W. OF TAYLORS BAYOU PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
VINYL ACETATE (TRI Chemical ID: 000108054)	2007	Pounds		ONYX ENVIRONMENTAL HWY 73 3.5 MILES W. OF TAYLORS BAYOU PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
VINYL ACETATE (TRI Chemical ID: 000108054)	2006	Pounds	40073	ONYX ENVIRONMENTAL HWY 73 3.5 MILES W. OF TAYLORS BAYOU PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
VINYL ACETATE (TRI Chemical ID: 000108054)	2001	Pounds	250	CHEMICAL WASTE MANAGEMENT 7170 JOHN BRANNON ROAD SULFUR, LA 70665	Landfill/Disposal Surface Impoundment
VINYL ACETATE (TRI Chemical ID: 000108054)	2001	Pounds	5	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Thermal Treatment
VINYL ACETATE (TRI Chemical ID; 000108054)	2001	Pounds	4200	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
				CHEM WASTE MANAGEMENT	

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VINYL ACETATE (TRI Chemical ID: 000108054)	1998	Pounds	5		Landfill/Disposal Surface Impoundment
VINYL ACETATE (TRI Chemical ID: 000108054)	1998	Pounds		TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
VINYL ACETATE (TRI Chemical ID: 000108054)	1998	Pounds	3267	DISPOSAL SYS. INC. 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Underground Injection
VINYL CHLORIDE (TRI Chemical ID: 000075014)	1998	Pounds	750	SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
VINYL CHLORIDE (TRI Chemical ID: 000075014)	1998	Pounds		TXI 245 WARD RD: MIDLOTHIAN, TX 76065	Storage Only
VINYLIDENE CHLORIDE (TRI Chemical ID: 000075354)	1999	Pounds	1799	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
VINYLIDENE CHLORIDE (TRI Chemical ID: 000075354)	1999	Pounds	33881	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Thermal Treatment
VINYLIDENE CHLORIDE (TRI Chemical ID: 000075354)	1998	Pounds	4840	TXI 245 WARD RD. MIDLOTHIAN, TX 76065	Energy Recovery
VINYLIDENE CHLORIDE (TRI Chemical ID: 000075354)	1998	Pounds	3226	SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2008	Pounds	14774	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2007	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Transfer to Waste Broker-Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2006	Pounds	35117	CLEAN HARBORS LAPORTE 500 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Thermal Treatment
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2006	Pounds	2909.71	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Thermal Treatment
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2005	Pounds	143058	CLEAN HARBORS 500 BATTLEGROUND ROAD	Indneration/Thermal Treatment

<u> </u>			1	LA PORTE, TX 77571	1
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2005	Pounds	2794	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Thermal Treatment
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2005	Pounds	228.46	RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Insignificant Fuel Value
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2004	Pounds	365.4	LIQUID ENVIRONMENTAL SOLUTIONS 250 GELHORN HOUSTON, TX 77013	Wastewater Treatment (Excluding POTW)
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2004	Pounds		ONYX ENVIRONMENTAL SERVICES HIGHWAY 73 3.5 MI WEST OF TAYLORS BAYOU PORT ARTHUR, TX 77640	Incineration/Insignificant Fuel Value
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2004	Pounds		RINECO 1007 VULCAN ROAD BENTON, AR 72015	Incineration/Insignificant Fuel Value
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2003	Pounds	20196.4	LIQUID ENVIRONMENTAL SOLUTIONS 250 GELHORN HOUSTON, TX 77013	Wastewater Treatment (Excluding POTW)
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2002	Pounds .	16174.66	LIQUID ENVIRONMENTAL SOLUTIONS 250 GELHORN HOUSTON, TX 77013	Wastewater Treatment (Excluding POTW)
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2001	Pounds		TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2000	Pounds	196200	TXI OPERATIONS 245 WARD ROAD MIDLOTHIAN, TX 76065	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2000	Pounds	130800	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	1999	Pounds	151894	SAFETY KLEEN 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Energy Recovery
XYLENE (MIXED ISOMERS)	1999	Pounds	250	SAFETY KLEEN 2027 BATTLEGROUND ROAD	Incineration/Thermal Treatment

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(TRI Chemical ID: 001330207)			· .	DEER PARK, TX 77536	
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	1998	Pounds		TXI 245 WARD RD. MIDLOTHIAN, TX 7606S	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	1998	Pounds	69433	SAFETY KLEEN 2027 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	1998	Pounds	250	CHEM WASTE MANAGEMENT 7170 JOHN BRANNON RD. SULPHUR, LA 70665	Energy Recovery

Summary of Waste Management Activities

Please note that chemical amounts shown here are not included in Total Aggregate Releases shown above.

Summary of Waste Management Activites excluding Dioxin and Dioxin-like Compounds (Measured in Pounds)

Year		Off-Site Recycling	On-Site Energy Recovery	Off-Site Energy Recovery	On-Site Treatment	Off-Site Treatment	Total Amount
2007	0	1944	0	205511	42785	22372	272612
2008	0	1590	0	143575	5769	12218	163152
2009 (Projected)	.0	2500	0	148700	11500	14500	177200
2010 (Projected)	0	2500	. 0	148700	11500	14500	177200

Summary of Waste Management Activites for Dioxin and Dioxin-like Compounds (Measured in Grams)

This facility did not report any waste management activites for Dioxin and Dioxin-like Compounds.

Chemicals Under Waste Management

Please note that chemical amounts shown here are not included in the Total Aggregate Releases shown above. Transfers to Publicly Owned Treatment Works are listed on a seperate table.

Chemical Year Name Year	Unit Of On-Site Measure Recycling	Off-Site On-Site Energy Recycling Recovery	Off-Site Energy Recovery	On-Site Off- Treated Treated Ar	rotal nount
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BENZEŃE	2007	Pounds	0	0	0)	28774	28774	. 250	57808
	2008	Pounds	0	0	0	27022	0	:::99	27121
	2009 (Projected)	Pounds	0	0	O	30000	250	500	30750
· · · · · · · · · · · · · · · · · · ·	2010 (Projected)	Pounds	. 0	0	. 0	30000	250	500	30750
BUTYL ACRYLATE	2007	Pounds	0	0	0	Ď	0	412	412
	. 2008	Pounds	. i. 0	0	0	0	0	412	412
	2009 (Projected)	Pounds	0	0	Ö	0	0	450	450
	2010 (Projected)	Pounds	0	Q	0	0	0	450	450
CUMENE	2007	Pounds	0	1944	0	0	0	· · · · · · · · · · · · · · · · · · ·	1944
	2008	Pounds	. 0	1590		. 0	. 0	0	1590
	2009 (Projected)	Pounds	0	2500	. 0	0	0	0	2500
	2010 (Projected)	Pounds	0	2500	0	Ó	0	0	2500
CYCLOHEXANE	2007	Pounds	0	0	. 0	3295	3295	. 0	6590
	2008	Pounds	0	0	0	2669	0	0	2669
	2009 (Projected)	Pounds	0	0	Ö	4000	4000	0	8000
	2010 (Projected)	Pounds	0	0	O	4000	4000	D	8000
ETHYLBENZENE	2007	Pounds	0	0	0	. 0	757	. 500	1257
	2008	Pounds	0	0	0	- 0	0	432	432
	2009 (Projected)	Pounds	0	0	0	O	750	550	1300
	(Projected)	Pounds	0	0	0	0	.750	550	- 1300
METHANOL	2007	Pounds .	. 0	. 0		68220		0	68220
	2008	Pounds	0	0	.0	39101	0	0	39101
	2009 (Projected)	Pounds	0	.0	Ò	39500	0	Ò	39500
	2010 (Projected)	Pounds	0	0	D	39500	0	0	39500

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	II	,			s II		. 1		
METHYL ISOBUTYL KETONE	2007	Pounds	0	٥	o	0	o	15173	15173
	2008	Pounds	0	0	0	0	0	8692	8692
	2009 (Projectéd)	Pounds	0	0	.0	O	0	8500	8500
	2010 (Projected)	Pounds -	0	C	D	0	0	8500	8500
N-BUTYL ALCOHOL	2007	Pounds	0	0	0	252	0	0	.252
	2008	Pounds	0	0	Ö	203	0	Ö	203
	2009 (Projected)	Pounds	Ó	a	0	200	٥	0	200
	2010 (Projected)	Pounds	0	0	0	200	0	a	200
NAPHTHALENE	2007	Pounds-	0	0	0	13528	.0	0	13528
	2008	Pounds	0	0	0	10865	0	0	10865
	2009 (Projected)	Pounds	0	Ó	0	10000	0	250	10250
	2010 (Projected)	Pounds	0	0	0	10000	0	250	10250
STYRENE	2007	Pounds	0	0	0	42918	0	0	42918
	2008	Pounds	0	0	. 0	35906	0	0	35906
	2009 (Projected)	Pounds	0	0	0	35000	0	250	35250
	2010 (Projected)	Pounds	0	. 0	0	35000	. 0	250	35250
TOLUENE	2007	Pounds	. 0	0	0	22748	D	0	22748
	2008	Pounds	. 0	0	. 0	13035	0	0	13035
	2009 (Projected)	Pounds	0	0	0	15000	0	500	15500
	2010 (Projected)	Pounds	0	0	0	15000	0	500	15500
VINYL ACETATE	2007	Pounds	0	. 0	. 0	0	6027	6027	12054
	2008	Pounds	0	0	.0	o	2583	2583	. 5166
	(2009 (Projected)	Pounds	0	. 0	0	. 0	3000	3000	6000
	2010	Pounds	0	0	0	0	3000	3000	6000

L	(Projected)			L		<u> </u>	L		
XYLENE (MIXED ISOMERS)	2007	Pounds	0	0	o• 0	25776	3932	0	29708
	2008	Pounds	С	0	0	14774	3186	0	17960
·	2009 (Projected)	Pounds	0	0	0	15000	3500	500	19000
	2010 (Projected)	Pounds	0	0	. 0	15000	3500	500	

Transfer of Chemicals to Publicly Owned Treatment Works (POTW):
This fadility did not transfer any chemicals to a Publicly Owned Treatment Works (POTW).

Non Production Releases:

This facility did not report any Non-Production releases.

Additional links for TRI:

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* National Library of Medicine (NLM) TOXMAP

http://oaspub.epa.gov/enviro/tris_control.tris_print?tris_id=77536MPKNC2759B

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Reference 25

Shell Oil Company, Deer Park, Texas. Accessed April 13, 2011.

3 pages. Available:

http://www.shell.us/home/content/usa/aboutshell/projects_locations/deerpark/about_deer_park/

You are here: U.S. Homepage > About Shell > Projects and Locations >

About Shell Deer Park Deerpark >

About Deer Park

In 1929, just before the Great Depression, Shell Oil Company became the first manufacturer to call Deer Park home. At the time, there were no other businesses or buildings in what is now a bustling community about 20 miles east of downtown Houston.

Refinery Work Pres Park Deer Park Details

Deer Park Details
Refifing oyees - approximately 1,000 plus a varying number of contractors' employees.

- Operations process unit operators, utility operators, etc.
- Maintenance pipefitters, metal crafts, instrument repair, electricians, painters, machinists, laborers, etc.
- Staff supervisors, associate staff, engineers, financial, security, etc.

Operating Statistics

Shell Deer Park is a "heavy sour crude refining company."

- Crude Processing Capacity: approximately 340,000 barrels per day (14.3 million gallons)
- Crude Processed: more than half of the crude oil processed at the refinery is Maya imported from Mexico. The balance is from Africa, Venezuela and other countries.

Product Shipments

The geographic location of Shell Deer Park is one of its most important assets. It is strategically located in terms of feedstock supply, product distribution and storage access. The facility has access to multiple major crude oil and product pipelines. Its location on the Houston Ship Channel and its extensive dock facilities allow for waterborne delivery of crudes and products.

Dock Facilities

The Gulf of Mexico offers greater flexibility and lower transportation costs than most other U.S. locations. Annually, an average of 2,500 to 2,700 vessels are loaded/discharged, handling approximately 100 million barrels (about 4 billion gallons) of crude oil and products for the refinery, chemical plant, and lubricants plant. The site docks rank, in volume, among the top 25 largest ports in the United States. The docks system has the capability to handle tankers as large as 80,000 tons.

Refinery Products & Uses

Products made in the refinery are the types most people think of when they think of an "oil company," such as gasoline, aviation fuels, ship and utility fuels, and furnace oil/diesel fuels.

Gasoline: Regular and premium unleaded gasoline used in passenger cars.

The refinery produces reformulated and conventional gasoline for domestic and international markets.

- Jet Fuel and Kerosene: Commercial and military aviation
- Diesel Fuel and Heating Oil: Known as #2 oil. Low sulfur diesel is used in the trucking industry and in heavy-duty machinery. Heating oil is used as fuel for furnaces primarily in the northeastern U.S.
- , Propane and Butane: LPG for domestic and industrial uses
- Asphalt: Road construction and roofing materials
- , #6 Oil: Tanker fuel, power generation and locomotives
- Chemical Feedstocks: Ethane, propane and butane are used in the manufacture of ethylene, a major building block for chemical products. Other products include gas oils, naphthas and reformates.
- Petroleum Coke: Petroleum coke is used as fuel for power generation and cement kilns.
- Electricity: For internal consumption and sold to the domestic and industrial markets along the Houston Ship Channel.

Processing Units

- Fluid Catalytic Cracker: "Cat cracking" is a refining process used to manufacture gasoline. The process uses intense heat, low pressure and powdered catalyst to accelerate the chemical reaction of the heavy fractions into smaller gasoline molecules.
- Selective Hydrocracker: Partially converts diesel-range material into gasoline, propane and butane via a chemical reaction that uses high temperatures and pressures in a catalyst-containing reactor.
- Distilling Units: Crude oil is heated until it boils and as the oil boils, it vaporizes. Each hydrocarbon rises to a tray at a temperature just below its own boiling point. There, it cools and turns back to a liquid. The lightest fractions are liquefied petroleum gases (propane and butane) and the petrochemicals used to make plastics and other products. Next come gasoline, kerosene and diesel fuel. Heavier fractions are used as home heating oil and as fuel in ships and factories. Still heavier fractions are made into lubricants and waxes. The remains, which include asphalt, are known as "residuals."
- Alkylation Plant: Converts light hydrocarbons to heavier hydrocarbons more compatible as gasoline components for high-octane gasoline.
- Catalytic Reforming: A process for upgrading low octane naphtha to a high octane gasoline blending component, reformate. Important by-products of this process include hydrogen, benzene, toluene, and xylenes.
- Delayed Coker: Converts petroleum pitch into petroleum coke and gas oils for processing in other units to higher quality, higher value diesel fuel and gasoline.
- Gas Oil Hydrotreater: Provides for removal of sulfur and nitrogen from various products, making them more suitable for conversion feed to other process units.
- Gas Plants: There are a number of gas plants in the refinery. Their functions are similar: collect gases from processing units (hydrocracker, hydrotreater, reformer, coker, cat cracker) and separate volatiles into appropriate product streams.
- Sulfur Recovery Unit: Recovers sulfur from refinery streams as elemental sulfur for sale as end-use products.
- *Co-generation Power Plant (150 megawatts)*: Converts surplus refining fuel and natural gas into electricity and steam to be used by different units at

Shell Deer Park.

Reference 26

Environmental Protection Agency. Envirofacts Report.
Shell Chemical, Shell Oil Deer Park LP.

31 pages. Accessed March 8, 2010. Available: http://oaspub.epa.gov/enviro/multisys2.get_list?facility_uin=110000599424



Toxics Release Inventory (TRI)

You are here: EPA Home Envirofacts TRI Envirofacts Report

http://oaspub.epa.gov/enviro/tris_control.tris_print?tris_id=77535DRPRK5900H Last updated on Monday, March 08, 2010



Envirofacts Report



Overv executed on MAR-08-2010 Results are based on data extracted on MAR-02-2010

Click on "View Facility Information" to view EPA Facility information for the facility.

Facility Name:

SHELL OIL CO DEER PARK REFINING LP Mailing Name:

SHELL OIL CO DEER PARK REFINING L.P.

Address:

5900 HWY 225 DEER PARK TX 77536

View Facility Information

PO BOX 100 DEER PARK TX 77536

County: Facility Information: HARRIS

Region:

TRI.ID: FRS ID

Malling Address:

77536DRPRK5900H 110000599424

DUNS Number: 618143986

TRI Preferred Latitude:

TRI Preferred Longitude:

CHRIS BOZMAN, MGR COMM RELNNS

Phone:

7132466151

Public Contact: Parent Company:

SHELL OIL CO

Parent DUNS:

008090938

Starting with Reporting Year 2006, TRI Facilities began reporting NAICS codes, instead of SIC codes, to identify their Primary Business Activities.

NAICS Codes for 2008

NAICS CODE PRIMARY NAICS DESCRIPTION YES Petroleum Refineries 324110

The above information comes from 2008, which was the last year NAICS code data was reported for this facility. The earliest NAICS code data on file for this facility was reported in 1998.

Map this facility (+)

Map this facility using one of Envirofact's mapping utilities.

Besides TRI, this facility also does the following:

- has reported air releases under the Clean Air Act
- has permits to discharge to water

More information about these additional regulatory aspects of this facility can be found by pressing the other regulatory data button below.

Other Regulatory Data

Total Aggregate Releases of TRI Chemicals to the Environment:

For all releases estimated as a range, the mid-point of the range was used in these calculations. This table summarizes the releases reported by the facility. NR signifies nothing reported by this facility for the corresponding medium.

Total Aggregate Releases of TRI Chemicals excluding Dioxin and Dioxin-like Compounds (Measured in Pounds)

Media	2008	2007	2006	2005	.2004	2003	2002	2001	2000	1999	1998
Air Emissions	329150.551	269693.2	262907.1	326825.88	471243.097	921160.9133	1238547.2385	1307873.0303	655474.9	600936	494282
Surface Water Discharges	1635700	1190810	1600366	1300687	1611149	1142310	868647	713959	327364.72	1333347	1522040
Releases to Land	NR	NR	· NR	NR	52700	. 42	2.5	NR	NR	1	1983
Underground Injection	NR	NR	NR	NR	NR	NR.	NR	NR	NR	NR	NR
Total On-Site Releases	1964850.551	1460503.2	1863273.1	1627512.88	2135092.097	2063512.9133	2107196.7385	2021832.0303	982839.62	1934284	2018305
Transfer Off- Site to Disposal	9607.06	23092.7	146.51	20100.75	17	36898.5688	20156.72009	88433	1032	72418	12999
Total Releases	1974457.611	1483595.9	1863419.61	1647613.63	2135109.097	2100411.4821	2127353.45859	2110265.0303	983871.62	2006702	2031304

Graphic Summary of this Table

Total Aggregate Releases of Dioxin and Dioxin-like Compounds (Measured in Grams)

Media	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
Air Emissions	.1573	.1559	.16	.2	.6	.1578	.1578	.154	.14	NR	NR
Surface Water Discharges	.1303	.1397	.12	.1139	.1361	.1274	NR	NR	NR	NR	NR
Releases to Land	NR	NR	NR	NR	NR	NR	1.22	NR	NR	NR	NR
Underground Injection	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Total On-Site Releases	.2876	.2956	.28	.3139	.7361	.2852	1.3778	.154	.14	NR	NR
Transfer Off-Site to Disposal	35.3338	36.6065	25	18.4282	10.921	.8331	9.43	NR	NR	NR	NR
Total Releases	35.6214	36.9021	25.28	18.7421	11.6571	1.1183	10.8078	.154	.14	NR	NR

Graphic Summary of this Table

TRI Chemicals Reported on Form A:

Please note that there were no chemicals reported on Form A for this facility

NOTE:
All chemicals reported below have release or transfer amounts greater than zero. To see a list of all chemicals reported by this facility click here.

Names and Amounts of Chemicals Released to the Environment by Year.

For all releases estimated as a range, the mid-point of the range was used in these calculations. NR - signifies nothing reported for this facility by the corresponding medium. Rows with all "0" or "NR" values were not listed.

Chemical Name	Media	Unit Of Measure	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
1.1.1-TRICHLOROETHANE. (TRI Chemical ID: 000071556)	AIR FUG	Pounds	NR	NR	NR	NR	NR	75	1	1100	NR	9300	1100
1,1,1-TRICHLOROETHANE (TRI Chemical ID: 000071556)	AIR STACK	Pounds	NR	NR	490	500	NR	1	486	880	890	880	1200
1.2.3-TRICHLOROPROPANE (TRI Chemical ID: 000096184)	AIR FUG	Pounds	2	2	1	1	0	23	.5	5300	5300	4500	5000
1.2.3-TRICHLOROPROPANE (TRI Chemical ID: 000096184)	AIR STACK	Pounds	8	0	440	160	1800	2817	84858	2	2	5	38
1,2,3-TRICHLOROPROPANE (TRI Chemical ID: 000096184)	WATER	Pounds	NR	, NR	NR	NR	NR	49	. NR	· NR	98	NR	130
1,2,4-TRIMETHYLBENZENE (TRI Chemical ID: 000095636)	AIR FUG	Pounds	12	NR	NR	NR	NR	77	32	2300	1300	120	1500
1.2.4-TRIMETHYLBENZENE (TRI Chemical ID: 000095636)	AIR STACK	Pounds	526	473	340	350	260	0	33	30	290	1000	890
1.2-DICHLOROETHANE (TRI Chemical ID: 000107062)	AIR FUG	Pounds	NR	NR	NR	NR	NR	NR	NR	5300	5300	3100	500
1,2-DICHLOROETHANE (TRI Chemical ID: 000107062)	WATER	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	280	NR	27
1,3-BUTADIENE (TRI Chemical ID: 000106990)	AIR FUG	Pounds	113	7	7	24.7	60	41	12	370	250	6200	1300
1,3-BUTADIENE (TRI Chemical ID: 000106990)	AIR STACK	Pounds	13661	5125	3300	451.64	1200	659	11453	9900	9900	15000	3500
ACETONITRILE (TRI Chemical ID: 000075058)	AIR FUG	Pounds	1	0	0	i	1	0	NR	970	970	2000	2500
ACETONITRILE (TRI Chemical ID: 000075058)	AIR STACK	Pounds	2908	3697	1900	2600	860	933	696	D	o	0	0
ACETONITRILE (TRI Chemical ID: 000075058)	WATER	Pounds	1052	. NR	; NR	NR	1200	679	415	NR	840	NR	8400
ACETOPHENONE (TRI Chemical ID: 000098862)	AIR FUG	Pounds	0	NR	NR	NR	ÑŔ	0	NR	NR	NR	NR.	1
ACETOPHENONE (TRI Chemical ID: 000098862)	AIR STACK	Pounds	1906	171	420	170	2300	0	461	N R	NR	NR	0
ACETOPHENONE (TRI Chemical ID:	DISP NON	Pounds	NR	NR	NR	NR	NR	NR	3.502	NR	NR	NR	0

000098862)	METALS												
ACETOPHENONE (TRI Chemical ID: 000098862)	WATER	Pounds	185	NR	, NR	. NR	i. 99	143	171	NR	NR	NR	2
ALLYL ALCOHOL (TRI Chemical ID: 000107186)	AIR FUG	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	. 2
ALLYL ALCOHOL (TRI Chemical ID: 000107186)	WATER	Pounds	NR	. NR	. NR	NR	NR	NR	NR	NR	NR	NR	2
AMMONIA (TRI Chemical IO: 007664417)	AIR FUG	Pounds	1	NR	NR	NR	NR	58	19	7	1	2800	6900
AMMONIA (TRI Chemical ID: 007664417)	AIR STACK	Pounds	20629	6411	10000	7760	.12580	15133	14252	11000	NR	200	81
AMMONIA (TRI Chemical ID: 007664417)	SI 5.5.3B	Pounds	NR	. NR	NR	NR	3700	NR	NR	NR	NR	NR	NR
AMMONIA (TRI Chemical ID: 007664417)	WATER	Pounds	122	NR	NR	NR	NR	261	180	16	70	20	2
ANTHRACENE (TRI Chemical ID: 000120127)	AIR STACK	Pounds	.12	0	NR	NR	0	NR	1	1	NR	NR	NR
ANTIMONY COMPOUNDS (TRI Chemical ID: N010)	RCRA C	Pounds	· NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	210
BARIUM COMPOUNDS (TRI Chemical ID: N040)	DISP METALS	Pounds	О	1.54	NR	. 0	NR	NR	NR	NR	NR	NR	NR
BARIUM COMPOUNDS (TRI Chemical ID: N040)	DISP NON METALS	Pounds	1	.62	NR	.36	NR	1.5948	131.79	2933	61	. 8	147
BARIUM COMPOUNDS (TRI Chemical ID: N040)	OTH LANDE	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	NR	1	NR
BARIUM COMPOUNDS (TRI Chemical ID: N040)	RCRA C	Pounds	NR	NR	NR	NR	NR	NR.	2.5	NR	. NR	NR	3
BARIUM COMPOUNDS (TRI Chemical ID: N040)	WATER	Pounds	1749	NR	NR	· NR	NR	1855	1876	1831	1800	1400	2200
BENZENE (TRI Chemical ID: 000071432)	AIR FUG	Pounds	4176	279	320	670.77	530	15498	802	6600	5800	10000	15000
BENZENE (TRI Chemical ID: 000071432)	AIR STACK	Pounds	18242	15314	13000	25015.72	11000	9290	12930	21000	17000	18000	6000
BENZENE (TRI Chemical ID: 000071432)	DISP NON METALS	Pounds	41	29	3.12	3.09	17	211	77.5	59	303	O	48
BENZENE (TRI Chemical ID: 000071432)	WATER	Pounds	1	NR	NR	NR	1	. 2	1	1	2	NR	4
BENZO(G.H.I)PERYLENE (TRI Chemical ID: 000191242)	AIR FUG	Pounds	.131	0	0	NR	· NR	NR	NR	.03	NR	NR	NR.
BENZO(G.H.I)PERYLENE (TRI Chemical ID: 000191242)	AIR STACK	Pounds	NR	0	. 0	O	.15	.1145	.1585	.1203	5.9	. NR	NR
BUTYRALDEHYDE (TRI Chemical ID: 000123728)	AIR FUG	Pounds	NR	NR	NR	. NR	NR	2	3	17000	NR	2600	2800
BUTYRALDEHYDE (TRI Chemical ID: 000123728)	AIR STACK	Pounds	· o	0	0	0	0	2980	1	5900	33100	1	0
BUTYRALDEHYDE (TRI Chemical ID: 000123728)	WATER	Pounds	NR	NR	NR	NR	. NR	177	1636	296	3100	NR	200
CERTAIN GLYCOL ETHERS (TRI Chemical ID: N230)	AIR STACK	Pounds	NR	NR	NR	NR	NR	1	46	10	14	12	7
CHLORINE (TRI Chemical ID: 007782505)	AIR STACK	Pounds	2999	2999	3000	3000	3000	NR	375	3600	NR	2400	11000
CHLOROFORM (TRI Chemical ID: 000067663)	AIR FUG	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	17000	NR	NR
CHLOROFORM (TRI Chemical ID: 000067663)	AIR STACK	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	20	NR	NR
CHLOROFORM (TRI Chemical ID: 000067663)	WATER	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	160	NR	NR
CHROMIUM (TRI Chemical ID:	DISP	Pounds	NR	NR	NR	NR	NR	71	NR	NR	NR	NR	NR

007440473)	METALS						لـــــا						
CHROMIUM (TRI Chemical ID: 007440473)	WATER	Pounds	NR	NR	NR	NR	NR	133	NR	NŔ	NR	NR	NR.
CHROMIUM COMPOUNDS (EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemical ID: N090)	DISP METALS	Pounds	NR	15.38	NR	.39	NR	ŇR	NR NR	NR	NR	NR	NR
CHROMIUM COMPOUNDS (EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemical ID: N090)	DISP NON METALS	Pounds	15	6.16	NR	NR	NR	NR	NR	NR	8	171	NR
CHROMIUM COMPOUNDS (EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemical ID: N090)	WATER	Pounds	232	NR	NR	NR	NR	NR	, . ŅR	NR	130	98	NR
COBALT (TRI Chemical ID: 007440484)	DISP NON METALS	Pounds	ŇR	NR	NR	NR	, NR	ÑR	4062	22770	NR	NR	NŔ
COBALT COMPOUNDS (TRI Chemical ID: N096)	DISP NON METALS	Pounds	N R	NR	NR	NR	NR	ŊR	NR	NR	NR	8900	3400
COBALT COMPOUNDS (TRI Chemical ID: N096)	RCRA C	Pounds	NR	NR	NR	NR.	NR	ŃR	NR	NR	NR	. NŘ	1200
COPPER COMPOUNDS (TRI Chemical ID: N100)	WATER	Pounds	NR	NR	NR	. NR	NR	ŃŔ	NR	235	230	NR	210
CUMENE (TRI Chemical ID: 000098828)	AIR FUG	Pounds	NR	NR	NR	NR	NR	NR 	, NR	. NR	NR	3800	4100
CUMENE (TRI Chemical ID: 000098828)	AIR STACK	Pounds	NR	NR	NR	NR	NR	NR	NR.	NR	NR	540	1600
CUMENE (TRI Chemical ID: 000098828)	WATER	Pounds	N R	NR	ŊŖ	NR	NŘ	NR	NR	NR	ŃŔ	NŘ	13
CYCLOHEXANE (TRI Chemical ID: 000110827)	AIR FUG	Pounds	773	70	170	193.61	20	1012	211	1600	670	\$80	750
CYCLOHEXANE (TRI Chemical ID: 000110827)	AIR STACK	Pounds	6052	1765	1600	8262.06	5200	22418	21654	44000	2400	9600	7100
CYCLOHEXANE (TRI Chemical ID: 000110827)	WATER	Pounds	NR	NR	NR	NR	NR	4	NR	NR	0	NR	NR
DICYCLOPENTADIENE (TRI Chemical ID: 000077736)	AIR FUG	Pounds	NR	NR	NR	NR	NR	NR	. NR	13	10	7	170
DICYCLOPENTADIENE (TRI Chemical ID: 000077736)	AIR STÁCK	Pounds	NR	NR	NR	NR	NR	NR	24	8	8	1300	40
DIETHANOLAMINE (TRI Chemical ID: 000111422)	AIR FUG	Pounds	3478	58	48	110	99	11189	138	5400	3200	1700	810
DIETHANOLAMINE (TRI Chemical ID: 000111422)	AIR STACK	Pounds	0	1	· O	0	0	NR	NR	0	0	o	1
DIETHANOLAMINE (TRI Chemical ID: 000111422)	DISP NON METALS	Pounds	8940	22680	NR	20000	NR	NR	NR.	NR	NR	NR	NR
DIOXIN AND DIOXIN-LIKE COMPOUNDS (TRI Chemical ID: N150)	AIR STACK	Grams	.1573	.1559	.16	.2	.6	.1578	.1578	.154	.14	NR	NR
DIOXIN AND DIOXIN-LIKE COMPOUNDS (TRI Chemical ID: N150)	DISP NON METALS	Grams	35.3338	36.6065	25	18.4282	10.921	.8331	9.43	NR	NR	NR	NR
DIOXIN AND DIOXIN-LIKE COMPOUNDS (TRI Chemical ID: N150)	RCRA C	Grams	NR	NR	NR	NR	NR	NR	1.22	NR	NR	NR	NR
DIOXIN AND DIOXIN-LIKE COMPOUNDS (TRI Chemical ID: N150)	WATER	Grams	.1303	.1397	.12	.1139	.1361	.1274	NR	NR	NR	NR	NR
EPICHLOROHYDRIN (TRI Chemical ID: 000106898)	AIR FUG	Pounds	NR	NR	NR	NR	NR	ŇR	NR	NR	NR	NR	1200
EPICHLOROHYDRIN (TRI Chemical ID: 000106898)	AIR STACK	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	530
EPICHLOROHYDRIN (TRI Chemical ID:	WATER	Pounds	NR	NR	NR	NR	NR	. NR	· NR	NR	NR	NR	. 2

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MERCURY COMPOUNDS (TRI Chemical ID: N458)	DISP NON METALS	Pounds	NR	NR	NR	NR	. NR	NR	NR	1	NR	`NR	, NR
MERCURY COMPOUNDS (TRI Chemical ID: N458)	WATER	Pounds	1	5	6	NR	2	5	NR	5	4.72	NR	NR
METHANOL (TRI Chemical ID: 000067561)	AIR FUG	Pounds	NR	· NR	NR	NR	NR	573	31	3100	2300	13000	22000
METHANOL (TRI Chemical ID: 000067561)	AIR STACK	Pounds	12216	14782	12000	18000	12000	17908	15126	9100	1000	8600	8400
METHANOL (TRI Chemical ID: 000067561)	WATER	Pounds	3404	NR	NR	NR	7600	10035	5089	NR	5800	NR	3500
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	AIR FUG	Pounds	NR	NR	NR	NR	NR	115	112	82	72	60000	75000
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	AIR STACK	Pounds	NR	NR	NR	NR	NR	8020	22865	53500	77000	4200	7600
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	DISP NON METALS	Pounds	NR	NR	. NR	NR	NR ·	NR	73.7	217	38	NR.	96
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	WATER	Pounds	NR	NR	NR	NR	NR	1204	. 545	330	760	NR	1500
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	AIR FUG	Pounds	0	0	0	2	1	19	14	74	NR	260	1000
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	AIR STACK	Pounds	15916	12912 :	9900	9000	17000	10745	3915	2600	NR	1600	3600
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	DISP NON METALS	Pounds	NR	NR	NR	NR	NR	NR	614.2	1811	NR	NR	800
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	WATER	Pounds	6	17	17	17	17	53	4	3	NR	NR	28
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	AIR FUG	Pounds	NR	0	o	0	0	9490	3360	32000	31000	45000	38000
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	AIR STACK	Pounds	NR	50768	66000	59100	47000	48047	145098	61200	20000	23000	.14000
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	SI 5.5.38	Pounds	NR	NR	NR	NR	49000	NR	NR	NR	NR	NR	NR
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	WATER	Pounds	NR	NR	NR	· · NR	2000	2145	1760	1474	1900	NR	3200
MOLYBDENUM TRIOXIDE (TRI Chemical ID: 001313275)	DISP NON METALS	Pounds	NR.	NR	' NR	NR	NR	. NR	13540	NR	NR	NR	NR
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	AIR FUG	Pounds	NR	NR	NR	NR	. NR	NR	NR	NR	NR	1000	2300
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	AIR STACK	Pounds	NR.	NR	NR	NR	NR	NR.	NR	NR	NR	10000	15000
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	WATER	Pounds	NR	NR	NR	. NR	NR	NR	NR	NR	NR	NR	1300
N-HEXANE (TRI Chemical ID: 000110543)	AIR FUG	Pounds	2262	167	420	426.39	41	5034	1158	11000	8300	10000	22000
N-HEXANE (TRI Chemical ID: 000110543)	AIR STACK	Pounds	35061	18341	15000	34172.89	39000	18355	27543	50000	29000	41000	46000
N-METHYL-2-PYRROLIDONE (TRI Chemical ID: 000872504)	AIR FUG	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	NR	7900	0
NAPHTHALENE (TRI Chemical ID: 000091203)	AIR FUG	Pounds	0	NR	NR	NR	NR	2	1	260	140	4	57
NAPHTHALENE (TRI Chemical ID: 000091203)	AIR STACK	Pounds	247	177	220	349.9	630	154	113	140	170	130	460
NAPHTHALENE (TRI Chemical ID: 000091203)	DISP NON METALS	Pounds	1	5	1.75	2	NR	NR	22.61	NR	NR	NR	NR
NICKEL (TRI Chemical ID:	AIR FUG	Pounds	NR	NR	NR	NR	. NR	NR	. 1	NR.	NR	NR	NR

000106898)							·]						<u></u>
ETHYLBENZENE (TRI Chemical ID: 000100414)	AIR FUG	Pounds	73	0	0	0	NR	381	71	1400	1150	910	2600
ETHYLBENZENE (TRI Chemical ID: 000100414)	AIR STACK	Pounds	2142	1978	3600	4900	11000	2658	2977	2700	4200	6100	5500
ETHYLBENZENE (TRI Chemical ID: 000100414)	DISP NON METALS	Pounds	. 2	10	3.12	2.7	NR	NR	73.7	217	31	NR.	96
ETHYLENE (TRI Chemical ID: 000074851)	AIR FUG	Pounds	63	6	5	5	28	203	115	2100	16000	900	. 1600
ETHYLENE (TRI Chemical ID: 000074851)	AIR STACK	Pounds	28066	7971	8900	16292	6100	9766	4679	2200	200	4700	8800
HYDRAZINE (TRI Chemical ID: 000302012)	AIR FUG	Pounds	NR.	NR :	NR	NR	NR	NR :	NR	NR	NR	760	0
HYDRAZINE (TRI Chemical ID: 000302012)	AIR STACK	Pounds	NR	NR	NR	N R	NR	NR	NR	NR	NR	· o	2
HYDROCHLORIC ACID (1995 AND AFTER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007647010)	AIR FUG	Pounds	NR	NR	NR	NR	NR	NR	NR	NR:	NR	1	.0
HYDROCHLORIC ACID (1995 AND AFTER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007647010)	AIR STACK	Pöunds	NR	NR.	NR	NR :	NR	NR	NR.	44000	ŅŔ	NR	4700
HYDROGEN CYANIDE (TRI Chemical ID: 000074908)	AIR STACK	Pounds	330	368	320	325.3	772	914	819	930	NR	NR	NR
LEAD (TRI Chemical ID: 007439921)	AIR STACK	Pounds	NR	NR	NR	NR	NR	7	47	NR	NR	NR.	NR
LEAD (TRI Chemical ID: 007439921)	DISP NON METALS	Pounds	NR	NR	NR	NR	NR	12.96	141.88	. NR	NR	NR	NR
LEAD (TRI Chemical ID: 007439921)	RCRA_C	Pounds	ŊR	NR	NR	NR	NR	·42	NR	NR	NR	NR	NR
LEAD (TRI Chemical ID: 007439921)	WATER	Pounds	NR.	NR	NR	NR	NR	123	:, 122	NR	ŃR	NR	NR
LEAD COMPOUNDS (TRI Chemical ID: N420)	AIR STACK	Pounds	NR	NR	NR	NR	.31	NR	NR	93	NR	NR	NR
LEAD COMPOUNDS (TRI Chemical ID: N420)	DISP METALS	Pounds	.31	16	52.3	17.46	NR	NR	NR	NR	NR	NR	NR
LEAD COMPOUNDS (TRI Chemical ID: N420)	DISP NON METALS	Pounds	14.75	24	NR.	NR.	NR	ŅR	NR	NŔ	NR	NR.	NR
LEAD COMPOUNDS (TRI Chemical ID: N420)	WATER	Pounds	51	128	144	250	62	NR	." NR	119	NR	NR	NR
M-CRESQL (TRI Chemical ID: 000108394)	AIR FUG	Pounds	NR	NR	NR	ŊŖ	NR	ŊR	1	1	NR	NR	NR
M-XYLENE (TRI Chemical ID: 000108383)	AIR FUG	Pounds	NR	NR	NR	NR	NR	718	148	3400	3100	1300	4200
M-XYLENE (TRI Chemical ID: 000108383)	AIR STACK	Pounds	2820	2185	1800	5513.64	2700	166	958	7900	18000	24000	22000
M-XYLENE (TRI Chemical ID: 000108383)	DISP NON METALS	Pòünds	NR	NR	NR	, NR	ŃR	NR	· NR	NR	172	NR	NR
MANGANESE (TRI Chemical ID: 007439965)	DISP NON METALS	Pounds	NR	NR	NR	NR	NR	36450	NR	NR	NR	NR	NR
MERCURY (TRI Chemical ID: 007439976)	AIR STACK	Pounds	NR	NR	NR	. NR	NR	NR	11.58	NR	NR	NR	NR
MERCURY (TRI Chemical ID: 1007439976)	WATER	Pounds	NR	NR	· NR	. NR	NR	NR	5	. NR	NR	NR	NR
MERCURY COMPOUNDS (TRI Chemical ID: N458)	AIR FUG	Pounds	.3	.2	.2	NR	NR	NR	ŃR	NR	NR	NR	NR
MERCURY COMPOUNDS	AIR	Pounds	NR	NR.	NR	NR	.207	.1388	NŔ	14	24	NR	NR

007440020)	H	1											
NICKEL (TRI Chemical IO: 1007440020)	DISP NON METALS	Pounds	. NR	NR	NR	NR	NŔ	152.014	113.83809	NR	NR	NR	'NR
NICKEL (TRI Chemical ID: 007440020)	WATER	Pounds	NR	, NR	NR	NR	NR	246	183	NR	NR	NR	NR
NICKEL COMPOUNDS (TRI Chemical ID: N495)	DISP METALS	Pounds	3	38	NR	. 2	NR	NR	NR	NR	NR	NR	NR
NICKEL COMPOUNDS (TRI Chemical ID: N495)	DISP NON . METALS	Pounds	578	222	71.53	5 60	· NR	NR	· NR	49960	7	7339	6700
NICKEL COMPOUNDS (TRI Chemical ID: N495)	RCRA_C	Pounds	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	570
NICKEL COMPOUNDS (TRI Chemical ID: N495)	WATER	Pounds	114	175	. 199	420	167	ŅR	NR	238	240	NR	190
NITRATE COMPOUNDS (TRI Chemical ID: N511)	WATER	Pounds	1628782	1190485	1600000	1300000	1600000	1125195	856660	708500	311000	1331000	1500000
O-CRESOL (TRI Chemical ID: 000095487)	AIR STACK	Pounds	0	0	0	0	2	1	1	1	NR	NR	NR
O-XYLENE (TRI Chemical ID: 000095476)	AIR FUG	Pounds	9	0	1	1.47	o	192	92	3200	3300	3200	4100
O-XYLENE (TRI Chemical ID: 000095476)	AIR STACK	Pounds	494	776	450	1110.71	14000	833	3180	2300	2300	3700	3400
P-CRESOL (TRI Chemical ID: 000106445)	AIR FUG	Pounds	NR	NR	NR	NR	NR	NR	1	1	NR	NR	NR
P-XYLENE (TRI Chemical ID: 000106423)	AIR FUG	Pounds	NR	NR	NR	NR	NR	90	1	17	19	18	160
P-XYLENE (TRI Chemical ID: 000106423)	AIR STACK	Pounds	. 2	NR	1	NR	NR	419	10	10	11	11	0
PHENANTHRENE (TRI Chemical ID: 000085018)	AIR STACK	Pounds	. 1	1	NR	NR	NR	. NR	1	. 1	NR	NR	NR
PHENANTHRENE (TRI Chemical ID: 000085018)	DISP NON METALS	Pounds	1	5	1.81	2	NR	NR	NR	NR	NR	NR	NR
PHENOL (TRI Chemical ID: 000108952)	AIR FUG	Pounds	NR.	NR	NR.	NR.	NR	NR	NR	39	40	94	230
PHENOL (TRI Chemical ID: 000108952)	AIR STACK	Pounds	NR	NR	. NR	· NR	NR.	NR	NR.	4800	4700	2100	2900
PHENOL (TRI Chemical ID: 000108952)	DISP NON METALS	Pounds	ŊŖ	NR	NR	NR	. NR	NR	NR.	6501	NR	NR	0
PHENOL (TRI Chemical ID: 000108952)	WATER	Pounds	NR	- NR	NR ·	NR	NR	, NR	NR	NR	50	29	29
POLYCYCLIC AROMATIC COMPOUNDS (TRI Chemical ID: N590)	AIR FUG	Pounds	1	1	.7	NR	NR	NR	NR	NR	NR	0	17
POLYCYCLIC AROMATIC COMPOUNDS (TRI Chemical ID: N590)	AIR STACK	Pounds	9	3	3.2	6.82	8.43	4.66	16	7.88	12	33	73
PROPYLENE (TRI Chemical ID: 000115071)	AIR FUG	Pounds	268	14	13	153.92	780	835	583	5900	19000	1800	5400
PROPYLENE (TRI Chemical ID: 000115071)	AIR STACK	Pounds	39256	25307	19000	25619.38	13000	45470	45916	44000	39000	72000	26000
SEC-BUTYL ALCOHOL (TRI Chemical ID: 000078922)	AIR FUG	Pounds	NR	NR.	NR	NR	NR	NR	NR	NR	NR	NR	2900
SEC-BUTYL ALCOHOL (TRI Chemical ID: 000078922)	AIR STACK	Pounds	NR	NR	NR	NR	NR	NR	NR	· NR	NR	NR	9
STYRENE (TRI Chemical ID: 000100425)	AIR FUG	Pounds	N R	NR.	NR	NR	NR	NR	NR	NR	NR	3	68
STYRENE (TRI Chemical ID: 000100425)	AIR STACK	Pounds	NR	NR	NR	NR	NR	NR	NR	NR.	NR	7	0
SULFURIC ACID (1994 AND AFTER "ACID AEROSOLS" ONLY)	AIR FUG	Pounds	397	NR	NR	. NR	NR	NR	NR	NR	NR	0	. 0

(TRI Chemical ID: 007664939)													
SULFURIC ACID (1994 AND AFTER "ACID AFROSOLS" ONLY) (TRI Chemical ID: 007664939)	AIR STACK	Pounds	88144	66116	67000	71864.81	83430	614279	743408	742100	220000	101000	2800
TERT-BUTYL ALCOHOL (TRI Chemical ID: 000075650)	AÍR FUĞ	Pounds	NR	NR	NR	NR	NŔ	NR	NR	NR	NR	NR	87
TERT-BUTYL ALCOHOL (TRI Chemical ID: 000075650)	AIR STACK	Pounds	NR	NR	NR	NR	NR	NR	NR.	NR	NR	NŘ	1
TOLUENE (TRI Chemical ID: 000108883)	AIR FUG	Pounds	3444	113	230	280	640	3630	975	36000	34000	34000	42000
TOLUENE (TRI Chemical ID: 000108883)	AIR STACK	Pounds	18416	28028	11000	17419.15	140000	28582	58672	36500	18000	20000	18000
TOLUENE (TRI Chemical ID: 000108883)	DISP NON METALS	Pounds	2	10	3.22	2.75	NR -	. NR	958	2945	403	. 0	1260
TOLUENE (TRI Chemical ID: 000108883)	WATER	Pounds	1	NŔ	NR	NR	1	1	NR	1	0	NR	1
VANADIUM (EXCEPT WHEN CONTAINED IN AN ALLOY) (TRI Chemical ID: 007440622)	DISP NON METALS	Pounds	NR	NR	NR	NR	NR	NR	NR	4	NR	NR	NR
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	AIR FUG	Pounds	839	9	7	12	200	263	1	11	6	160	8
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	AIR STACK	Pounds	3187	3298	12000	13000	44000	11080	8038	2900	ŊR	2800	690
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	DISP NON METALS	Pounds	8	30	9.66	8	NR	NR	344	1015	NR	NR	450
ZINC COMPOUNDS (TRI Chemical ID: N982)	AIR STACK	Pounds	NR	NR	NR	NR	NR	. NR	NR	NR	NR	NR	· 5000
ZINC COMPOUNDS (TRI Chemical ID: N982)	DISP NON METALS	Pounds	NR	NR	NR	NR	NR	NR	NR	NŘ	9	56000	2
ZINC COMPOUNDS (TRI Chemical ID: N982)	WATER	Pounds	NR	NR	NR	NR	NR	NR	NR	910	900	.800	1100

Discharge of Chemicals into Streams or Bodies of Water:

For all releases estimated as a range, the mid-point of the range was used in these calculations. Rows with Release Amount equal to "0" were not listed.

Chemical Name	Year	Unit Of Measure	Release Amount	Stream Or Body of Water
1,2,3-TRICHLOROPROPANE (TRI Chemical ID: 000096184)	2003	Pounds	49	HOUSTON SHIP CHANNEL
1,2,3-TRICHLOROPROPANE (TRI Chemical ID: 000096184)	2000	Pounds	98	HOUSTON SHIP CHANNEL
1.2.3-TRICHLOROPROPANE (TRI Chemical ID: 000096184)	1998	Pounds	130	HOUSTON SHIP CHANNEL
1.2-DICHLOROETHANE (TRI Chemical ID: 000107062)	2000	Pounds	280	HOUSTON SHIP CHANNEL
1.2-DICHLOROETHANE (TRI Chemical ID: 000107062)	1998	Pounds	27	HOUSTON SHIP CHANNEL
ACETONITRILE (TRI Chemical ID: 000075058)	2008	Pounds	1052	HOUSTON SHIP CHANNEL
ACETONITRILE (TRI Chemical ID: 000075058)	2004	Pounds	1200	HOUSTON SHIP CHANNEL
ACETONITRILE (TRI Chemical ID: 000075058)	2003	Pounds	679	HOUSTON SHIP CHANNEL
ACETONITRILE (TRI Chemical ID: 000075058)	2002	Pounds	415	HOUSTON SHIP CHANNEL
ACETONITRILE (TRI Chemical ID: 000075058)	2000	Pounds	840	HOUSTON SHIP CHANNEL
ACETONITRILE (TRI Chemical ID: 000075058)	1998	Pounds	8400	HOUSTON SHIP CHANNEL
ACETOPHENONE (TRI Chemical ID: 000098862)	2008	Pounds	185	HOUSTON SHIP CHANNEL.
ACETOPHENONE (TRI Chemical ID: 000098B62)	2004	Pounds	99	HOUSTON SHIP CHANNEL
ACETOPHENONE				

[TRI Chemical ID: 000098862)	2003	Pounds	143	HOUSTON SHIP CHANNEL
ACETOPHENONE (TRI Chemical ID: 000098862)	2002	Pounds	171	HOUSTON SHIP CHANNEL
ACETOPHENONE (TRI Chemical ID: 000098862)	1998	Pounds	2	HOUSTON SHIP CHANNEL
ALLYL ALCOHOL (TRI Chemical ID: 000107186)	1998	Pounds	2	HOUSTON SHIP CHANNEL
AMMONIA (TRI Chemical ID: 007664417) .	2008	Pounds	122	HOUSTON SHIP CHANNEL
AMMONIA (TRI Chemical ID: 007664417)	2003	Pounds	. 261	HOUSTON SHIP CHANNEL
AMMONIA (TRI Chemical ID: 007664417)	2002	Pounds	180	HOUSTON SHIP CHANNEL
AMMONIA (TRI Chemical ID: 007664417)	2001	Pounds	. 16	HOUSTON SHIP CHANNEL
AMMONIA ICTRI Chemical ID: 007664417)	2000	Pounds	70	HOUSTON SHIP CHANNEL
AMMONIA	1999	Pounds	20	HOUSTON SHIP CHANNEL
(TRI Chemical ID: 007664417) AMMONIA	1998	Pounds		HOUSTON SHIP CHANNEL
(TRI Chemical ID: 007664417) BARIUM COMPOUNDS	╬	Pounds		HOUSTON SHIP CHANNEL
(TRI Chemical ID: NO40) BARIUM COMPOUNDS	╬			
(TRI Chemical ID: NO40)		Pounds	1855	HOUSTON SHIP CHANNEL
BARIUM COMPOUNDS (TRI Chemical ID: NO40)	2002	Pounds	1876	HOUSTON SHIP CHANNEL
BARIUM COMPOUNDS (TRI Chemical ID: NO40)	2001	Pounds	1831	HOUSTON SHIP CHANNEL
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2000	Pounds	1800	HOUSTON SHIP CHANNEL
BARIUM COMPOUNDS (TRI Chemical ID: NO40)	1999	Pounds	1400	HOUSTON SHIP CHANNEL
BARIUM COMPOUNDS (TRI Chemical ID: NO40)	1998	Pounds	2200	HOUSTON SHIP CHANNEL
BENZENE (TRI Chemical ID: 000071432)	2008	Pounds	1	HOUSTON SHIP CHANNEL
BENZENE (TRI Chemical ID: 000071432)	2004	Pounds	. 1	HOUSTON SHIP CHANNEL
BENZENE (TRI Chemical ID: 000071432)	2003	Pounds	. 2	HOUSTON SHIP CHANNEL
BENZENE (TRI Chemical ID: 000071432)	2Ó02	Pounds	1	HOUSTON SHIP CHANNEL
BENZENE (TRI Chemical ID: 000071432)	2001	Pounds	1	HOUSTON SHIP CHANNEL
BENZENE (TRI Chemical ID: 000071432)	2000	Pounds	2	HOUSTON SHIP CHANNEL
BENZENE (TRI Chemical ID: 000071432)	1998	Pounds	, 4	HOUSTON SHIP CHANNEL
BUTYRALDEHYDE (TRI Chemical ID: 000123728)	2003	Pounds	177	HOUSTON SHIP CHANNEL
BUTYRALDEHYDE (TRI Chemical ID: 000123728)	2002	Pounds	1636	HOUSTON SHIP CHANNEL
BUTYRALDEHYDE (TRI Chemical ID: 000123728)	2001	Pounds	. 296	HOUSTON SHIP CHANNEL
BUTYRALDEHYDE	╬	Pounds	3100	HOUSTON SHIP CHANNEL
(TRI Chemical ID: 000123728) BUTYRALDEHYDE	╬	Pounds	200	HOUSTON SHIP CHANNEL
(TRI Chemical ID: 000123728) CHLOROFORM	╬	Pounds		HOUSTON SHIP CHANNEL
(TRI Chemical ID: 000067663) CHROMIUM	╬	Pounds		HOUSTON SHIP CHANNEL
(TRI Chemical ID: 007440473) CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL	2003	. ourius		TOOLOG OF STATE
REGION) (TRI Chemica! ID: NO90)	2008	Pounds	232	HOUSTON SHIP CHANNEL
CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemical ID: N090)	2000	Pounds .	130	HOUSTON SHIP CHANNEL
CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemical ID: NO90)	1999	Pounds	98	HOUSTON SHIP CHANNEL
COPPER COMPOUNDS (TRI Chemical ID: N100)	2001	Pounds	235	HOUSTON SHIP CHANNEL
COPPER COMPOUNDS (TRI Chemical ID: N100)	2000	Pounds	230	HOUSTON SHIP CHANNEL
COPPER COMPOUNDS		Pounds	210	HOUSTON SHIP CHANNEL
(TRI Chemical ID: N100)	4	<u> </u>		

CUMENE CTRI Chemical ID: 000098828)	1998	Pounds	13	HOUSTON SHIP CHANNEL
CYCLOHEXANE (TRI Chemical ID: 000110827)	2003	Pounds	4	HOUSTON SHIP CHANNEL
DIOXIN AND DIOXIN-LIKE COMPOUNDS (TRI Chemical ID: N150)	2008	Grams	.1303	HOUSTON SHIP CHANNEL
DIOXIN AND DIOXIN-LIKE COMPOUNDS (TRI Chemical ID: N150)	2007	Grams	.1397	HOUSTON SHIP CHANNEL
DIOXIN AND DIOXIN-LIKE COMPOUNDS (TRI Chemical ID; N150)	2006	Grams	, .12	HOUSTON SHIP CHANNEL
DIOXIN AND DIOXIN-LIKE COMPOUNDS (TRI Chemical ID: N150)	2005	Grams	:1139	HOUSTON SHIP CHANNEL
DIOXIN AND DIOXIN-LIKE COMPOUNDS (TRI Chemical ID: N150)	2004	Grams	.1361	HOUSTON SHIP CHANNEL
DIOXIN AND DIOXIN-LIKE COMPOUNDS (TRI Chemical ID: N150)	2003	Grams	.1274	HOUSTON SHIP CHANNEL
EPICHLOROHYORIN (TRI Chemical ID: 000106898)	1998	Pounds	2	HOUSTON SHIP CHANNEL
LEAD (TRI Chemical ID: 007439921)	2003	Pounds	123	HOUSTON SHIP CHANNEL
<u>LEAD</u> (TRI Chemical ID: 007439921)	2002	Pounds	122	HOUSTON SHIP CHANNEL
LEAD COMPOUNDS (TRI Chemical ID: N420)	2008	Pounds	51	HOUSTON SHIP CHANNEL
LEAD COMPOUNDS (TRI Chemical ID: N420)	2007	Pounds	128	HOUSTON SHIP CHANNEL
LEAD COMPOUNDS (TRI Chemical ID: N420)	2006	Pounds	144	HOUSTON SHIP CHANNEL
LEAD COMPOUNDS (TRI Chemical ID: N420)	2005	Pounds	250	HOUSTON SHIP CHANNEL
LEAD COMPOUNDS (TRI Chemical ID: N420)	2004	Pounds	62	HOUSTON SHIP CHANNEL
LEAD COMPOUNDS TRI Chemical ID: N420)	2001	Pounds	119	HOUSTON SHIP CHANNEL
MERCURY (TRI Chemical ID: 007439976)	2002	Pounds	5	HOUSTON SHIP CHANNEL
MERCURY COMPOUNDS (TRI Chemical ID: N458)	2008	Pounds	1	HOUSTON SHIP CHANNEL
MERCURY COMPOUNDS (TRI Chemical ID: N458)	2006	Pounds	6	HOUSTON SHIP CHANNEL
MERCURY COMPOUNDS (TRI Chemical ID: N458)	2004	Pounds	2	HOUSTON SHIP CHANNEL
MERCURY COMPOUNDS ICTRI Chemical ID: N458)	2003	Pounds	5	HOUSTON SHIP CHANNEL
MERCURY COMPOUNDS (TRI Chemical ID: N458)	2001	Pounds	5	HOUSTON SHIP CHANNEL
MERCURY COMPOUNDS TRI Chemical ID: N458)	2000	Pounds	. 4.72	HOUSTON SHIP CHANNEL
MERCURY COMPOUNDS (TRI Chemical ID: N458)	2007	Pounds	5	PATRICKS BAYOU
METHANOL (TRI Chemical ID: 000067561)	2008	Pounds	. 3404	HOUSTON SHIP CHANNEL
METHANOL (TRI Chemical ID: 000067561)	2004	Pounds	7.600	HOUSTON SHIP CHANNEL
METHANOL (TRI Chemical ID: 000067561)	2003	Pounds	10035	HOUSTON SHIP CHANNEL
METHANOL (TRI Chemical ID: 000067561)	2002	Pounds	5089	HOUSTON SHIP CHANNEL
METHANOL (TRI Chemical ID: 000067561)	2000	Pounds	5800	HOUSTON SHIP CHANNEL
METHANOL (TRI Chemical ID: 000067561)	1998	Pounds	3500	HOUSTON SHIP CHANNEL
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2003	Pounds	1204	HOUSTON SHIP CHANNEL
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2002	Pounds	545	HOUSTON SHIP CHANNEL
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2001	Pounds	330	HOUSTON SHIP CHANNEL
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2000	Pounds	760	HOUSTON SHIP CHANNEL
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	1998	Pounds	1500	HOUSTON SHIP CHANNEL
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2008	Pounds	6	HOUSTON SHIP CHANNEL
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2007	Pounds		HOUSTON SHIP CHANNEL
METHYL ISOBUTYL KETONE	2006	Pounds	<u> </u>	HOUSTON SHIP CHANNEL
(TRI Chemical ID: 000108101)	لتسا	L		

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METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2005	Pounds	17	HOUSTON SHIP CHANNEL
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2004	Pounds	17	HOUSTON SHIP CHANNEL
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2003	Pounds	53	HOUSTON SHIP CHANNEL
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2002	Pounds	4	HOUSTON SHIP CHANNEL
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2001	Pounds	3	HOUSTON SHIP CHANNEL
METHYL ISOBUTYL KETONE	1998	Pounds	28	HOUSTON SHIP CHANNEL
(TRI Chemical ID: 000108101) METHYL TERT-BUTYL ETHER	2004	Pounds	2000	HOUSTON SHIP CHANNEL
(TRI Chemical ID: 001634044) METHYL TERT-BUTYL ETHER		Pounds		HOUSTON SHIP CHANNEL
(TRI Chemical ID: 001634044) METHYL TERT-BUTYL ETHER		Pounds		HOUSTON SHIP CHANNEL
(TRI Chemical ID: 001634044) METHYL TERT-BUTYL ETHER	$\vdash \vdash$			
(TRI Chemical ID: 001634044) METHYL TERT-BUTYL ETHER	$\vdash \dashv$	Pounds	1474	HOUSTON SHIP CHANNEL
(TRI Chemical ID: 001634044)	2000	Pounds	1900	HOUSTON SHIP CHANNEL
METHYL TERT-BUTYL ETHER (TRI Chemical ID: 001634044)	1998	Pounds	3200	HOUSTON SHIP CHANNEL
N-BUTYL ALCOHOL (TRI Chemical ID: 000071363)	1998	Pounds	1300	HOUSTON SHIP CHANNEL
NICKEL (TRI Chemical ID: 007440020)	2003	Pounds	246	HOUSTON SHIP CHANNEL
NICKEL (TRI Chemical ID: 007440020)	2002	Pounds	183	HOUSTON SHIP CHANNEL
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2008	Pounds	114	HOUSTON SHIP CHANNEL
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2006	Pounds	199	HOUSTON SHIP CHANNEL
NICKEL COMPOUNDS	2004	Pounds	167	HOUSTON SHIP CHANNEL
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2001	Pounds	238	HOUSTON SHIP CHANNEL
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2000	Pounds	240	HOUSTON SHIP CHANNEL
NICKEL COMPOLINOS	1998	Pounds	190	HOUSTON SHIP CHANNEL
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2007	Pounds	175	PATRICKS BAYOU
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2005	Pounds	420	PATRICKS BAYOU
NITRATE COMPOUNDS (TRI Chemical ID: N511)	2008	Pounds	1628782	HOUSTON SHIP CHANNEL
NITRATE COMPOUNDS (TRI Chemical ID: N511)	2007	Pounds	1190485	HOUSTON SHIP CHANNEL
NITRATE COMPOUNDS (TRI Chemical ID: N511)	2006	Pounds	1600000	HOUSTON SHIP CHANNEL
NITRATE COMPOUNDS (TRI Chemical ID: NS11)	2005	Pounds	1300000	HOUSTON SHIP CHANNEL
NITRATE COMPOUNDS ((TRI Chemical ID: N511)	2004	Pounds	1600000	HOUSTON SHIP CHANNEL
NITRATE COMPOUNDS (TRI Chemical ID: N511)	2003	Pounds	1125195	HOUSTON SHIP CHANNEL
NITRATE COMPOUNDS: (TRI Chemical ID: N511)	2002	Pounds	856660	HOUSTON SHIP CHANNEL
NITRATE COMPOUNDS (TRI Chemical ID: N511)	2001	Pounds	708500	HOUSTON SHIP CHANNEL
NITRATE COMPOUNDS (TRI Chemical ID: N511)	2000	Pounds	311000	HOUSTON SHIP CHANNEL
NITRATE COMPOUNDS (TRI Chemical ID: N511)	1999	Pounds	1331000	HOUSTON SHIP CHANNEL
NITRATE COMPOUNDS (TRI Chemical ID: N511)	1998	Pounds	1500000	HOUSTON SHIP CHANNEL
PHENOL (TRI Chemical ID: 000108952)	2000	Pounds	50	HOUSTON SHIP CHANNEL
PHENOL (TRI Chemical ID: 000108952)	1999	Pounds	29	HOUSTON SHIP CHANNEL
PHENOL (TRI Chemical ID: 000108952)	1998	Pounds	29	HOUSTON SHIP CHANNEL
TOLUENS (CTRI Chemical ID: 000108883)	2008	Pounds	2	HOUSTON SHIP CHANNEL
TOLUENE (TRI Chemical ID: 000108883)	2004	Pounds	1	HOUSTON SHIP CHANNEL
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TOLUENE (TRI Chemical ID: 000108883)	2003	Pounds	1	HOUSTON SHIP CHANNEL
TOLUENE (TRI Chemical ID: 000108883)	2001	Pounds	1	HOUSTON SHIP CHANNEL
TOLUENE (TRI Chemical ID: 000108883)	1998	Pounds	1	HOUSTON SHIP CHANNEL
ZINC COMPOUNDS (TRI Chemical ID: N982).	2001	Pounds	910	HOUSTON SHIP CHANNEL
ZINC COMPOUNDS (TRI Chemical ID: N982)	2000	Pounds	900	HOUSTON SHIP CHANNEL
ZINC COMPOUNDS (TRI Chemical ID: N982)	1999	Pounds	800	HOUSTON SHIP CHANNEL
ZINC COMPOUNDS (TRI Chemical ID: N982)	1998	Pounds	1100	HOUSTON SHIP CHANNEL

Transfer of Chemicals to Off-Site Locations other than POTWs:

Please note that transfer amounts are not included in release totals shown above. For all releases estimated as a range, the mid-point of the range was used in these calculations. Rows with Total Transfer Amount equal to "0" were not listed.

Chemical Name	Year	Unit Of Measure	<u>Total</u> Transfer Amount	Transfer Site Name and Address	Type Of Waste Management
ACETOPHENONE (TRI Chemical ID: 000098862)	2002	Pounds	.002	TM DEER PARK SERVICES LLC 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Storage Only
ACETOPHENONE (TRI Chemical ID: 000098862)	2002	Pounds	3.5	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Underground Injection
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2008	Pounds	. 1	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2007	Pounds	.62	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2007	Pounds	1.39	TMDP 2525 BATTLEGROUND RD DEER PARK, TX 77536	Solidification/Stabilization-Metals and Metal Compounds only
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2007	Pounds ·	.15	US ECOLOGY 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Solidification/Stabilization-Metals and Metal Compounds only
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2005	Pounds	.04	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Other Landfilis
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2005	Pounds	.32	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Landfills
BARTUM COMPOUNDS (TRI Chemical ID: N040)	2003	Pounds	1.5691	BROWNING FERRIS INC. 2601 SOUTH JENKINS ROAD ANAHUAC, TX 77514	Other Landfills
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2003	Pounds	.0257	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	RCRA Subtitle C Landfills
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2003	Pounds	5.6002	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2003	Pounds	.023	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Other Reuse or Recovery
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2002	Pounds	7.336	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Other Reuse or Recovery
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2002	Pounds	19.03	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Other Landfills
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2002	Pounds	.595	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2002	Pounds	112.76	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Storage Only
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2001	Pounds	175	CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Storage Only
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2001	Pounds	1	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Underground Injection
BARIUM CÓMPOUNDS (TRI Chemical ID: N040)	2001	Pounds	62	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection

	13 1			GNI FACILITY DISPOSAL SYSTEMS,	
BARIUM COMPOUNDS (TRI Chemical ID: NO40)	2001	Pounds	1	INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Other Reuse or Recovery
BARIUM COMPOUNDS (TRI Chemical ID: NO40)	2001	Pounds	. 3	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Other Off-Site Management
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2001	Pounds .	2533	BROWNING FERRIS INC. 2601 SOUTH JENKINS ROAD ANAHUAC, TX 77514	Landfill/Disposal Surface Impoundmen
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2001	Pounds	159	CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Other Off-Site Management
BARIUM COMPOUNDS (TRI Chemical ID: ND40)	2000	Pounds	1	SAFETY-KLEEN-DEER PARK 2027 BATTLEGROUND RD DEER PARK, TX 77536	Other Waste Treatment
BARIUM COMPOUNDS (TRI Chemical ID: NO40)	2000	Pounds	1	CHEMICAL WASTE MANAGEMENT HWY. 73 3.5 MILES W. OF TAYLOR'S BAYOU PORT ARTHUR, TX 77640	Underground Injection
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2000	Pounds	2	CHEMICAL WASTE MANAGEMENT HWY. 73 3.5 MILES W. OF TAYLOR'S BAYOU PORT ARTHUR, TX 77640	Storage Only
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2000	Pounds	3	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Other Off-Site Management
BARIUM COMPOUNDS (TRI Chemical ID: N040)	2000	Pounds		GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection
BARIUM_COMPOUNDS (TRI Chemical ID: N040)	2000	Pounds	25	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Storage Only
BARIUM COMPOUNDS (TRI Chemical ID: NO40)	2000	Pounds	. 26	CHEMICAL WASTE MANAGEMENT HWY. 73 3.5 MILES W. OF TAYLOR'S BAYOU PORT ARTHUR, TX 77640	Other Off-Site Management
BARIUM COMPOUNDS (TRI Chemical ID: N040)	1999	Pounds	5	BROWNING-FERRIS INDUSTRIES BROWNING-FERRIS INDUSTRIES 2601 SOUTH JENKINS ROAD ANAHUAC, TX 77514	Landfill/Disposal Surface Impoundment
BARIUM COMPOUNDS (TRI Chemical ID: NO40)	1999	Pounds	3	SAFETY-KLEEN LAPORTE SAFETY- KLEEN 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Storage Only
BARIUM COMPOUNDS (TRI Chemical ID: NO40)	1999	Pounds	3	SAFETY-KLEEN CORPORATION SAFETY KLEEN - DEER PARK 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Other Waste Treatment
BARIUM COMPOUINDS (TRI Chemical ID: NO40)	1998	Pounds	84	LAIDLAW LAPORTE LAIDLAW ENVIRONMENTAL SERVICES 500 BATTLEGROUND ROAD LAPORTE, TX 77571	Storage Only
BARIUM COMPOUNDS (TRI Chemical ID: NO40)	1998	Pounds	63	SAFETY-KLEEN LAPORTE SAFETY- KLEEN 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Storage Only
BENZENE (TRI Chemical ID: 000071432)	2008	Pounds	7	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2008	Pounds	19	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2008	Pounds	133	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2008	Pounds	3	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
BENZENE (TRI Chemical ID: 000071432)	2008	Pounds	54	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
BENZENE (TRI Chemical ID: 000071432)	2008	Pounds	1	TMDP 2525 BATTLEGROUND RD DEER PARK, TX 77536	Storage Only
BENZENE (TRI Chemica) ID: 000071432)	2008	Pounds	21	TMDP 2525 BATTLEGROUND RD DEER PARK, TX 77536	Solidification/Stabilization
BENZENE				TMDP	

(TRI Chemical ID: 000071432)	2008	Pounds	37	2525 BATTLEGROUND RD DEER PARK, TX 77536	Underground Injection to Class I Wells
BENZENE (TRI Chemical ID: 000071432)	2007	Pounds	9	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
BENZENE (TRI Chemical ID: 000071432)	2007	Pounds	15	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
BENZENE (TRI Chemical ID: 000071432)	2007	Pounds		ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2007	Pounds	1	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery .
BENZENE (TRI Chemical ID: 000071432)	2007	Pounds	. 2	TMDP 2525 BATTLEGROUND RD DEER PARK, TX 77536	Solidification/Stabilization °
BENZENE (TRI Chemical ID: 000071432)	2007	Pounds	7	GULF CHEMICAL & METALLURGICAL 302 MIDWAY RD FREEPORT, TX 77541	Solvents/Organics Recovery
BENZENE (TRI Chemical ID: 000071432)	2007	Pounds	1.01	CLEAN HARBORS 2027 BATTLEGROUND RD LA PORTE, TX 77571	Incineration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2007	Pounds	1	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Insignificant Fuel Value
BENZENE (TRI Chemical ID: 000071432)	2007	Pounds	19	TMDP 2525 BATTLEGROUND RD DEER PARK, TX 77536	Underground Injection to Class I Wells
BENZENE (TRI Chemical ID: 000071432)	2007	Pounds	1	US ECOLOGY 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Underground Injection to Class I Wells
BENZENE (TRI Chemical ID: 000071432)	2006	Pounds	39	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2006	Pounds	.02	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Inclneration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2006	Pounds	.14	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2006	Pounds	.38	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2006	Pounds	3.4	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
BENZENE (TRI Chemical ID: 000071432)	2006	Pounds	2.54	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2006	Pourido,	6.57	GULF CHEMICAL & METALLURGICAL 302 MIDWAY RD FREEPORT, TX 77541	Other Reuse or Recovery
BENZENE (TRI Chemical ID: 000071432)	2006	Pounds	3.12	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
BENZENE (TRI Chemical ID: 000071432)	2006	Pounds	42.15	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
BENZENE (TRI Chemical ID: 000071432)	2005	Pounds	.04	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2005	Pounds	10	VOPAC 2759 BATTLEGROUND RD DEER PARK, TX 77536	Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2005	Pounds	3	US ECOLOGY TEXAS	RCRA Subtitle C Landfills
BENZENE (TRI Chemical ID: 000071432)	2005	Pounds	35	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2005	Pounds	5.88	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
BENZENE (TRI Chemical ID: 000071432)	2005	Pounds	7	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
BENZENE (TRI Chemicai ID: 000071432)	2005	Pounds	.09	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Other Landfills
BENZENE	2005	Pounds	21.92	DURATHERM 2700 AVENUE 5	Other Reuse or Recovery

(TRI Chemical ID: 000071432)	.	L		SAN LEON, TX 77539	
BENZENE (TRI Chemical ID: 000071432)	2005	Pounds	.53	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2004	Pou nd s	6	CHEMICAL WASTE MANAGEMENT · 7170 JOHN BRANNON RD. SULPHUR, LA 70665	RCRA Subtitle C Landfills
BENZENE (TRI Chemical ID: 000071432)	2004	Pounds	180	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Inclneration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2004	Pounds	11	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
BENZENE (TRI Chemical ID: 000071432)	2003	Pounds	100	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2003	Pounds	3	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
BENZENE (TRI Chemical ID: 000071432)	2003	Pounds	-211	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	RCRA Subtitle C Landfills
BENZENE (TRI Chemical ID: 000071432)	2003	Pounds	9	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Incineration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2002	Pounds	77.5	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Storage Only
BENZENE (TRI Chemical ID: 000071432)	2002	Pounds	.2	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2001	Pounds	215	CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Incineration/Insignificant Fuel Value
BENZENE (TRI Chemical ID: 000071432)	2001	Pounds	115	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
BENZENE (TRI Chemical ID: 000071432)	2001	Pounds	50	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Off-Site Management
BENZENE (TRI Chemical ID: 000071432)	2001	Pounds	9	CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Storage Only
BENZENE (TRI Chemical ID: 000071432)	2000	Pounds	1	SAFETY-KLEEN-DEER PARK 2027 BATTLEGROUND RD DEER PARK, TX 77536	Underground Injection
BENZENE (TRI Chemical ID: 000071432)	2000	Pounds	1	SAFETY-KLEEN - (LONE MT.) INC ROUTE 2, BOX 170 WAYNOKA, OK 73860	Incineration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2000	Pounds	1	SAFETY-KLEEN-DEER PARK 2027 BATTLEGROUND RD DEER PARK, TX 77536	Other Waste Treatment
BENZENE (TRI Chemical ID: 000071432)	2000	Pounds	444	SAFETY-KLEEN-DEER PARK 2027 BATTLEGROUND RD DEER PARK, TX 77536	Incineration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2000	Pounds	1	RINECO 1007 VULCAN D BENTON, AR 72015	Energy Recovery
BENZENE (TRI Chemical ID: 000071432)	2000	Pounds	. 5	SAFETY-KLEEN 500 BATTLEGROUND RD. LA PORTE, TX 77571	Storage Only
BENZENE (TRI Chemical ID: 000071432)	2000	Pounds		SAFETY-KLEEN 500 BATTLEGROUND RD. LA PORTE, TX 77571	Storage Only
RENZENE (TRI Chemical ID: 000071432)	2000	Pounds	. 1	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection
BENZENE (TRI Chemical ID: 000071432)	2000	Pounds	1	GNI FACILITY DISPOSAL SYSTEMS,	Incineration/Insignificant Fuel Value
BENZENE (TRI Chemical ID: 000071432)	2000	Pounds	110	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Storage Only
BENZENE (TRI Chemical ID: 000071432)	2000	Pounds	138	GNI FACILITY DISPOSAL SYSTEMS,	Incineration/Thermal Treatment
BENZENE				CHEMICAL WASTE MANAGEMENT HWY. 73 3.5 MILES W. OF	

(TRI Chemical ID: 000071432)	2000	Pounds	32	TAYLOR'S BAYOU PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
BENZENE (TRI Chemical ID: 000071432)	2000	Pounds	1	CHEMICAL WASTE MANAGEMENT HWY. 73 3.5 MILES W. OF TAYLOR'S BAYOU PORT ARTHUR, TX 77640	Incineration/InsignIfIcant Fuel Value
BENZENE (TRI Chemical ID: 000071432)	2000	Pounds	30	CHEMICAL WASTE MANAGEMENT HWY. 73 3.5 MILES W. OF TAYLOR'S BAYOU PORT ARTHUR, TX 77640	Other Off-Site Management
BENZENE (TRI Chemical ID: 000071432)	2000	Pounds	153	SAFETY-KLEEN 500 BATTLEGROUND RD, LA PORTE, TX 77571	Other Off-Site Management
BENZENE (TRI Chemical ID: 000071432)	1999	Pounds	32	CATALYST RECYCLING DURATHERM 2700 AVE S SAN LEON, TX 77539	Other Reuse or Recovery
BENZENE (TRI Chemica! ID: 000071432)	1999	Pounds	24	CATALYST RECYCLING DURATHERM 2700 AVE S SAN LEON, TX 77539	Other Waste Treatment
BENZENE (TRI Chemical ID: 000071432)	1998	Pounds .	100	CATALYST RECYCLING DURATHERM 2700 AVE S SAN LEON, TX 77539	Solvents/Organics Recovery
BENZENE (TRI Chemical ID: 000071432)	1998	Pounds	. 35	LAIDLAW LAPORTE LAIDLAW ENVIRONMENTAL SERVICES 500 BATTLEGROUND ROAD LAPORTE, TX 77571	Storage Only
BENZENE (TRI Chemical ID: 000071432)	1998	Pounds	13	SAFETY-KLEEN LAPORTE SAFETY- KLEEN 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Storage Only
BENZENE (TRI Chemical ID: 000071432)	1998	Pounds	360	SAFETY-KLEEN CORPORATION SAFETY KLEEN - DEER PARK 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Thermal Treatment
BENZO(G,H,I)PERYLENE (TRI Chemical ID: 000191242)	2005	Pounds	1	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
CHROMIUM (TRI Chemical ID: 007440473)	2003	Pounds	71	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	RCRA Subtitle C Landfills
CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemical ID: NO90)	2008	Pounds	15	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemical ID: NO90)	2007	Pounds *	6.16	US ECOLOGY 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemical ID: N090)	2007	Pounds	1.51	US ECOLOGY 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Solidification/Stabilization-Metals and Metal Compounds only
CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemical ID: NO90)	2007	Pounds	13.87	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Solidification/Stabilization-Metals and Metal Compounds only
CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemicai ID: NO90)	2006	Pounds	i	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemical ID: NO90)	2005	Pounds	3,39	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Metals Recovery
CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemical ID: NO90)	2005	Pounds	.39	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Solidification/Stabilization-Metals and Metal Compounds only
CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemical ID: NO90)	2000	Pounds	1	SAFETY-KLEEN 500 BATTLEGROUND RD. LA PORTE, TX 77571	Other Off-Site Management
CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemical ID: NO90)	2000	Pounds	1	SAFETY-KLEEN-DEER PARK 2027 BATTLEGROUND RD DEER PARK, TX 77536	Underground Injection
CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemical ID: NO90)	2000	Pounds	1	CHEMICAL WASTE MANAGEMENT HWY. 73 3.5 MILES W. OF TAYLOR'S BAYOU PORT ARTHUR, TX 77640	Other Off-Site Management
CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION)	2000	Pounds	1	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD	Storage Only

(TRI Chemical ID: NO90)	B			DEER PARK, TX 77536	
CHROMIUM COMPOUNDS(EXCEPT				GNI FACILITY DISPOSAL SYSTEMS,	
CHROMITE ORE MINED IN THE TRANSVAAL REGION)	2000	Pounds	1	2525 BATTLEGROUND ROAD	Underground Injection
(TRI Chemical ID: NO90) CHROMIUM COMPOUNDS(EXCEPT	╬┷	<u> </u>		DEER PARK, TX 77536 GNI FACILITY DISPOSAL SYSTEMS.	
CHROMITE ORE MINED IN THE TRANSVAAL REGION)	2000	Pounds	1	INC. 2525 BATTLEGROUND ROAD	Other Off-Site Management
(TRI Chemical ID: N090)	<u> </u>			DEER PARK, TX 77536	
CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION)	2000	Pounds	1	CHEMICAL WASTE MANAGEMENT HWY. 73 3.5 MILES W. OF TAYLOR'S BAYOU	Storage Only
(TRI Chemical ID: NO90) CHROMIUM COMPOUNDS(EXCEPT				PORT ARTHUR, TX 77640 CHEMICAL WASTE MANAGEMENT	
CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemical ID: NO90)	2000	Pounds	1	HWY. 73 3.5 MILES W. OF TAYLOR'S BAYOU PORT ARTHUR, TX 77640	Underground Injection
CHROMIUM COMPOUNDS(EXCEPT CHROMITE ORE MINED IN THE TRANSVAAL REGION)	1999	Pounds	170	2027 BATTLEGROUND ROAD	Other Land Disposal
(TRI Chemical ID: NO90) CHROMIUM COMPOUNDS(EXCEPT	<u> </u>			DEER PARK, TX 77536 SAFETY-KLEEN LAPORTE SAFETY-	
CHROMITE ORE MINED IN THE TRANSVAAL REGION) (TRI Chemical ID: NO90)	1999	Pounds	1	KI FEN	Storage Only
COBALT		· ·		GULF CHEMICAL & METALLURGICAL	·
(TRI Chemical ID: 007440484)	2002	Pounds	25380	302 MIDWAY ROAD FREEPORT, TX 77542	Other Reuse or Recovery
COBALT (TRI Chemical ID: 007440484)	2002	Pounds	4062	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Storage Only
CORALT	Н			DURATHERM	
COBALT (TRI Chemical ID: 007440484)	2002	Pounds	3708	2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
COBALT	2004			DURATHERM	
(TRI Chemical ID: 007440484)	2001	Pounds	22//0	2700 AVENUE S SAN LEON, TX 77539	Other Off-Site Management
COBALT COMPOUNDS	1999	Pounds	8900	CATALYST RECYCLING DURATHERM 2700 AVE S	Landfill/Disposal Surface Impoundment
(TRI Chemical ID; NO96)			0300	SAN LEON, TX 77539	and my Disposal Sandee Empoundment
COBALT COMPOUNDS	1998	Pounds	3400	CATALYST RECYCLING DURATHERM 2700 AVE S	Transfer to Waste Broker-Disposal
(TRI Chemical ID; NO96)				SAN LEON, TX 77539	
DIETHANOLAMINE (TRI Chemical ID: 000111422)	2008	Pounds		BFI GULF WEST LANDFILL 2601 S JINKINS RD	Other Landfills
(The Englished B) 500777 (22)	Ш			ANAHUAC, TX 77514 BFI GULF WEST LANDFILL	
DIETHANOLAMINE (TRI Chemical ID: 000111422)	2007	Pounds		2601 S JINKINS RD ANAHUAC, TX 77514	Other Landfills
DIETHANOLAMINE				BFI GULF WEST LANDFILL	
(TRI Chemical ID: 000111422)	2005	Pounds	20000	2601 S JINKINS RD ANAHUAC, TX 77514	Other Landfills
DIETHANOLAMINE				UNIVAR	Wastewater Treatment (Excluding
(TRI Chemical ID: 000111422)	2002	Pounds	210240	2759 BATTLEGROUND ROAD DEER PARK, TX 77536	POTW)
DIOXIN AND DIOXIN-LIKE COMPOUNDS	2000	Grams	35 3330	BFI MCCARTY RD LANDFILL	Other Landfills
(TRI Chemical ID: N150)	2008	3101113		S757 A OATES RD HOUSTON, TX 77078	Corp. Carreins
DIOXIN AND DIOXIN-LIKE COMPOUNDS (TRI Chemical ID: N150)	2007	Grams	36.6065	BFI MCCARTY RD LANDFILL 5757 A OATES RD HOUSTON, TX 77078	Other Landfills
DIOXIN AND DIOXIN-LIKE COMPOUNDS	Ĺ			BFI MCCARTY	
(TRI Chemical ID: N150)	2006	Grams	25	5757A OATES RD. HOUSTON, TX 77078	Other Landfills
DIOXIN AND DIOXIN-LIKE COMPOUNDS	2025	C		BFI GULF WEST LANDFILL	Other Landfille
(TRI Chemical ID: N150)	2005	Grams	18.4282	2601 S JINKINS RD ANAHUAC, TX 77514	Other Landfills
DIOXIN AND DIOXIN-LIKE COMPOUNDS	2004	Grams	7 401	BFI MCCARTY RD LANDFILL 11013 OLD BEAUMONT HWY.	Other Landfills
(TRI Chemical ID: N150)	2004	0101115	7.401	HOUSTON, TX 77020	Other Candina
DIOXIN AND DIOXIN-LIKE COMPOUNDS (TRI Chemical ID: N150)	2004	Grams	3.52	BFI GULF WEST LANDFILL 2601 S JINKINS RD ANAHUAC, TX 77514	Other Landfills
DIOXIN AND DIOXIN-LIKE COMPOUNDS	T			ONYX ENVIRONMENTAL SERVICES	
(TRI Chemical ID: N150)	2003	Grams	.8331	PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Other Landfills
DIOXIN AND DIOXIN-LIKE COMPOUNDS	2005	Come		BROWNING FERRIS INC.	Other Landfills
(TRI Chemical ID: N150)	2002	Grams	9.43	2601 SOUTH JENKINS ROAD ANAHUAC, TX 77514	Other Landfills
DIOXIN AND DIOXIN-LIKE COMPOUNDS	2001	Grams	467	CHEMICAL WASTE MANAGEMENT HWY 73	Incineration/Insignificant Fuel Value
(TRI Chemical ID: N150)	<u> </u>		.402	PORT ARTHUR, TX 77640	
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2008	Pounds	21	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Energy Recovery
2008	Pounds	ż	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
2008	Pounds	` 3	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
2008	Pounds	8	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
2007	Pounds	9	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
2007	Pounds	1	US ECOLOGY 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Underground Injection to Class I Wells
2007	Pounds	2	TMDP 2525 BATTLEGROUND RD DEER PARK, TX 77536	Solvents/Organics Recovery
2007	Pounds	6.87	GULF CHEMICAL & METALLURGICAL 302 MIDWAY RD FREEPORT, TX 77541	Other Reuse or Recovery
2007	Pounds	1	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
2007	Pounds	15	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
2006	Pounds	3.5	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
2006	Pounds	1.61	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
2006	Pounds	.38	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
2006	Pounds	.75	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
2006	Pounds	3.12	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
2006	Pounds	.03	TERIS DBA ENSCO 309 AMERICAN CIRCLE EL DORADO, AR 71730	Incineration/Thermal Treatment
2006	Pounds	.1	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Thermal Treatment
2006	Pounds	5.92	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Energy Recovery
2005	Pounds	5.88	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
2005	Pounds	6.9	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
2005	Pounds	9.5	VOPAC 2759 BATTLEGROUND RD DEER PARK, TX 77536	Energy Recovery
2005	Pounds	.2	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Energy Recovery
2005	Pounds	4.11	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
2005	Pounds	.21	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Energy Recovery
2005	Pounds	2.7	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
2005	Pounds	.4	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
2005	Pounds	.09	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Solidification/Stabilization
	2008 2007 2007 2006 2006 2006 2005	2008 Pounds 2008 Pounds 2008 Pounds 2007 Pounds 2007 Pounds 2007 Pounds 2007 Pounds 2007 Pounds 2006 Pounds 2005 Pounds	2008 Pounds 2 2008 Pounds 3 2008 Pounds 8 2007 Pounds 9 2007 Pounds 1 2007 Pounds 6.87 2007 Pounds 1 2007 Pounds 1 2007 Pounds 1 2007 Pounds 1 2006 Pounds 3.5 2006 Pounds 3.6 2006 Pounds 3.12 2006 Pounds 5.92 2005 Pounds 5.92 2005 Pounds 5.88 2005 Pounds 9.5 2005 Pounds 4.11 2005 Pounds 4.11 </td <td> 2008 Pounds 21 3277 COUNTY RD 69 ROBSTOWN, TX 78380 </td>	2008 Pounds 21 3277 COUNTY RD 69 ROBSTOWN, TX 78380

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ETHYLBENZENE (TRI Chemical ID: 000100414)	2005	Pounds	.2	2759 BATTLEGROUND RD DEER PARK, TX 77536	Incineration/Thermal Treatment
ETHYLBENZENE (TRI Chemical ID: 000100414)	2003	Pounds	4	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Incineration/Therma! Treatment
ETHYLBENZENE (TRI Chemical ID: 000100414)	2003	Pounds	5	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
ETHYLBENZENE (TRI Chemical ID: 000100414)	2003	Pounds	45	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Energy Recovery
ETHYLBENZENE (TRI Chemical ID: 000100414)	2003	Pounds	. 43	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
ETHYLBENZENE (TRI Chemical ID: 000100414)	2002	Pounds		ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Storage Only
ETHYLBENZENE (TRI Chemical ID: 000100414)	2002	Pounds	4.8	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Energy Recovery
ETHYLBENZENE (TRI Chemical ID: 000100414)	2001	Pounds		CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Other Off-Site Management
ETHYLBENZENE (TRI Chemical ID: 000100414)	2001	Pounds	114	CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Storage Only
ETHYLBENZENE (TRI Chemical ID: 000100414)	2000	Pounds		SAFETY-KLEEN 500 BATTLEGROUND RD. LA PORTE, TX 77571	Other Off-Site Management
ETHYLBENZENE (TRI Chemical ID: 000100414)	2000	Pounds	2	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Other Off-Site Management
ETHYLBENZENE (TRI Chemical ID: 000100414)	2000	Pounds		GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Insignificant Fuel Value
ETHYLBENZENE (TRI Chemical ID: 000100414)	2000	Pounds		GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Storage Only
ETHYLBENZENE (TRI Chemical ID: 000100414)	2000	Pounds	1	CHEMICAL WASTE MANAGEMENT HWY. 73 3.5 MILES W. OF TAYLOR'S BAYOU PORT ARTHUR, TX 77640	Storage Only
ETHYLBENZENE (TRI Chemical ID: 000100414)	1999	Pounds	45	CATALYST RECYCLING DURATHERM 2700 AVE S SAN LEON, TX 77539	Other Reuse or Recovery
ETHYLBENZENE (TRI Chemical ID: 000100414)	1998	Pounds	55	LAIDLAW LAPORTE LAIDLAW ENVIRONMENTAL SERVICES 500 BATTLEGROUND ROAD LAPORTE, TX 77571	Storage Only
ETHYLDENZENE (TRI Chemical ID: 000100414)	1998	Pounds	41	SAFETY-KLEEN LAPORTE SAFETY- KLEEN 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Storage Only
LEAD (TRI Chemical ID: 007439921)	2003	Pounds	6.16	TEXAS ECOLOGISTS 3.5 MILES S ON PETRINILA ROAD ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
<u>LEAD</u> (TRI Chemical ID: 007439921)	2003	Pounds	6.8	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	RCRA Subtitle C Landfills
LEAD (TRI Chemical ID: 007439921)	2002	Pounds .	3.5	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	RCRA Subtitle C Landfills
LEAD (TRI Chemical ID: 007439921)	2002	Pounds .	111.6	ONYX ENVIRONMENTAL SERVICES	Storage Only
LEAD (TRI Chemical ID: 007439921)	2002	Pounds	26.78	TEXAS ECOLOGISTS 3.5 MILES S ON PETRINILA ROAD ROBSTOWN, TX 78380	Other Off-Site Management
LEAD COMPOUNDS (TRI Chemical ID: N420)	2008	Pounds	14.75	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
LEAD COMPOUNDS (TRI Chemical ID: N420)	2008	Pounds	.31	TMDP	Solid ification/Stabilization-Metals and Metal Compounds only
LEAD COMPOUNDS (TRI Chemical ID: N420)	2007	Pounds	. 24	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
LEAD COMPOUNDS (TRI Chemical ID: N420)	2007	Pounds		TMDP 2525 BATTLEGROUND RD	Solid ification/Stabilization-Metals and Metal Compounds only

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				DEER PARK, TX 77536	
LEAD COMPOUNDS (TRI Chemical ID: N420)	2007	Pounds	2	US ECOLOGY 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Solidification/Stabilization-Metals and Metal Compounds only
LEAD COMPOUNDS (TRI Chemical ID: N420)	2006	Pounds	52.3	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Solidification/Stabilization-Metals and Metal Compounds only
LEAD COMPOUNDS (TRI Chemical ID: N420)	2006	Pounds		DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
LEAD COMPOUNDS (TRI Chemical ID: N420)	2005	Pounds		ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Solidification/Stabilization-Metals and Metal Compounds only
LEAD COMPOUNDS (TRI Chemical ID: N420)	2005	Pounds	19.65	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Metals Recovery
LEAD COMPOUNDS (TRI Chemical ID: N420)	2005	Pounds	1.32	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Solidification/Stabilization-Metals and Metal Compounds only
M-XYLENE (TRI Chemical ID: 000108383)	2000	Pounds	. 77	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Storage Only
M-XYLENE (TRI Chemical ID: 000108383)	2000	Pounds	9	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Other Off-Site Management
M-XYLENE (TRI Chemical ID: 000108383)	2000	Pounds	6	CHEMICAL WASTE MANAGEMENT HWY. 73 35 MILES W. OF TAYLOR'S BAYOU PORT ARTHUR, TX 77640	Storage Only
M-XYLENE (TRI Chemical ID: 000108383)	2000	Pounds .	, 80	SAFETY-KLEEN 500 BATTLEGROUND RD. LA PORTE, TX 77571	Other Off-Site Management
M-XYLENE (TRI Chemical ID: 000108383)	2000	Pounds	1	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Insignificant Fuel Value
MANGANESE (TRI Chemical ID: 007439965)	2003	Pounds	36450	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	RCRA Subtitle C Landfills.
MERCURY (TRI Chemical ID: 007439976):	2002	Pounds	30	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Metals Recovery
MERCURY COMPOUNDS (TRI Chemical ID: N458)	2006	Pounds: ·	.01	DURATHERM 2700 AVENUE \$ SAN LEON, TX 77539	Other Reuse or Recovery
MERCURY COMPOUNDS (TRI Chemical ID: N458)	2003	Pounds	25	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Metals Recovery
MERCURY COMPOUNDS (TRI Chemical ID: N458)	2001	Pounds	1	CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Storage Only
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2003	Pounds	46	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Energy Recovery
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2002	Pounds	4.8	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Energy Recovery
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2002	Pounds	73.7	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Storage Only
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2001	Pounds	114	CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Storage Only
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2001	Pounds	103	CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Other Off-Site Management
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2000	Pounds	1	CHEMICAL WASTE MANAGEMENT HWY. 73 3.5 MILES W. OF TAYLOR'S BAYOU PORT ARTHUR, TX 77640	Storage Only
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2000	Pounds .	17	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Storage Only
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2000	Pounds	1	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Incineration/Insignificant Fuel Value
METHYL ETHYL KETONE	2000	Pounds		GNI FACILITY DISPOSAL SYSTEMS, INC.	Other Off-Site Management

(TRI Chemica) ID: 000078933)				2525 BATTLEGROUND ROAD DEER PARK, TX 77536	
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2000	Pounds	7	CHEMICAL WASTE MANAGEMENT HWY. 73 3.5 MILES W. OF TAYLOR'S BAYOU PORT ARTHUR, TX 77640	Other Off-Site Management
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	2000	Pounds	11	SAFETY-KLEEN 500 BATTLEGROUND RD. LA PORTE, TX 77571	Other Off-Site Management
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	1998	Pounds	55	LAIDLAW LAPORTE LAIDLAW ENVIRONMENTAL SERVICES 500 BATTLEGROUND ROAD LAPORTE, TX 77571	Storage Only
METHYL ETHYL KETONE (TRI Chemical ID: 000078933)	1998	Pounds	41	SAFETY-KLEEN LAPORTE SAFETY- KLEEN 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Storage Only
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2003	Pounds	385	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Energy Recovery
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2002	Pounds	614.2	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Storage Only
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2002	Pounds	40	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Energy Recovery
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2001	Pounds		CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Other Off-Site Management
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	2001	Pounds	949	CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Storage Only
METHYL ISOBUTYL KETONE (TRI Chemical ID: 000108101)	1998	Pounds	340	SAFETY-KLEEN LAPORTE SAFETY- KLEEN 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Storage Only
METHYL ISOBUTYL KETONE (TRI Chernical ID: 000108101)	1998	Pounds	460	LAIDLAW LAPORTE LAIDLAW ENVIRONMENTAL SERVICES 500 BATTLEGROUND ROAD LAPORTE, TX 77571	Storage Only
MOLYBDENUM TRIOXIDE (TRI Chemical ID: 001313275)	2003	Pounds	153914	GULF CHEMICAL & METALLURGICAL 302 MIDWAY ROAD FREEPORT, TX 77542	Metals Recovery
MOLYBDENUM TRIOXIDE (TRI Chemical ID: 001313275)	2002	Pounds	13540	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Storage Only
MOLYBDENUM TRIOXIDE (TRI Chemical ID: 001313275)	2002	Pounds	12772	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
MOLYBDENUM TRIOXIDE (TRI Chemical ID: 001313275)	2002	Pounds	258174	GULF CHEMICAL & METALLURGICAL 302 MIDWAY ROAD FREEPORT, TX 77542	Other Reuse or Recovery
NAPHTHALENE (TRI Chemical ID: 000091203)	2008	Pounds	12	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Energy Recovery
NAPHTHALENE (TRI Chemical ID: 000091203)	2008	Pounds	1	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
NAPHTHALENE (TRI Chemical ID: 000091203)	2008	Pounds	2	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
NAPHTHALENE (TRI Chemical ID: 000091203)	2008	Pounds	. 5	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
NAPHTHALENE (TRI Chemical ID: 000091203)	2007	Pounds	3.85	GULF CHEMICAL & METALLURGICAL 302 MIDWAY RD FREEPORT, TX 77541	Other Reuse or Recovery
NAPHTHALENE (TRI Chemical ID: 000091203)	2007	Pounds	1	TMDP 2525 BATTLEGROUND RD DEER PARK, TX 77536	Solid ification/Stabilization
NAPHTHALENE (TRI Chemical ID: 000091203)	2007	Pounds	5	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
NAPHTHALENE (TRI Chemical ID: 000091203)	2007	Pounds	8	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
NAPHTHALENE (TRI Chemical ID: 000091203)	2006	Pounds	.02	TERIS DBA ENSCO 309 AMERICAN CIRCLE EL DORADO, AR 71730	Incineration/Thermal Treatment
NAPHTHALENE (TRI Chemical ID: 000091203)	2006	Pounds	.21	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery

2006	Pounds		TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Thermal Treatment
2006	Pounds	3.32	ONYX ENV SERVICES	Energy Recovery
2006	Pounds	1.75	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
2006	Pounds	1.9	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
2006	Pounds	.9	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
2006	Pounds	3.68	GULF CHEMICAL & METALLURGICAL 302 MIDWAY RD FREEPORT, TX 77541	Other Reuse or Recovery
2006	Pounds	.42	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
2005	Pounds	4	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
2005	Pounds	5	VOPAC 2759 BATTLEGROUND RD DEER PARK, TX 77536	Energy Recovery
2005	Pounds	2.3	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
2005	Pounds	2	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
2005	Pounds	.05	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Solidification/Stabilization
2005	Pounds	3.3	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
2003	Pounds	39	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
2003	Pounds	4	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
2003	Pounds	4	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Incineration/Thermal Treatment
2002	Pounds '	.01	TM DEER PARK SERVICES LLC 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Storage Only
2002	Pounds	22.6	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Underground Injection
1999	Pounds	40	CATALYST RECYCLING DURATHERM 2700 AVE 5 SAN LEON, TX 77539	Other Reuse or Recovery
2003	Pounds	.154	ONYX ENVIRONMENTAL SERVICES	RCRA Subtitle C Landfilis
2003	Pounds	66793	GULF CHEMICAL & METALLURGICAL 302 MIDWAY ROAD FREEPORT, TX 77542	Metals Recovery
2003	Pounds	24400		Other Reuse or Recovery
2003	Pounds	151.86	BROWNING FERRIS INC. 2601 SOUTH JENKINS ROAD	RCRA Subtitle C Landfills
2002	Pounds	.017	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W	Other Reuse or Recovery
2002	Pounds	.00009	TM DEER PARK SERVICES LLC 2525 BATTLEGROUND ROAD	Storage Only
2002	Pounds	113.4	ONYX ENVIRONMENTAL SERVICES	Other Landfills
	(ONYX ENVIRONMENTAL SERVICES	
	2006 2006 2006 2005 2005 2003	2006 Pounds	2006 Pounds .06 2006 Pounds 3.32 2006 Pounds 1.75 2006 Pounds 1.9 2006 Pounds .9 2006 Pounds .42 2005 Pounds .42 2005 Pounds 5 2005 Pounds 2.3 2005 Pounds .05 2005 Pounds .05 2005 Pounds .33 2005 Pounds .33 2003 Pounds .4 2003 Pounds .4 2003 Pounds .01 2002 Pounds .154 2003 Pounds .154 2002 Pounds	2006 Pounds 0.6 2525 BATTLEGROUND RD

NICKEL (TRI Chemical ID: 007440020)	2002	Pounds	76173	302 MIDWAY ROAD FREEPORT, TX 77542	Other Reuse or Recovery
NICKEL (TRI Chemical ID: 007440020)	2002	Pounds .	24400	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
NICKEL (TRI Chemical ID: 007440020)	2002	Pounds	.18	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Underground Injection
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2008	Pounds	2	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	RCRA Subtitle C Landfills
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2008	Pounds	452	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2008	Pounds	53	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2008	Pounds	67	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Other Landfills
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2008	Pounds	. 181	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2008	Pounds	3	TMDP 2525 BATTLEGROUND RD DEER PARK, TX 77536	Solidification/Stabilization-Metals and Metal Compounds only
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2008	Pounds	4	TMDP 2525 BATTLEGROUND RD DEER PARK, TX 77536	Storage Only
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2007	Pounds	11	US ECOLOGY 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Other Reuse or Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2007	Pounds	323	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2007	Pounds	208	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2007	Pounds	17.72	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Other Reuse or Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2007	Pounds	3.84	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Other Reuse or Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2007	Pounds	5.18	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Other Reuse or Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2007	Pounds	151	GULF CHEMICAL & METALLURGICAL 302 MIDWAY RD FREEPORT, TX 77541	Metals Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2007	Pounds	2	TMDP 2525 BATTLEGROUND RD DEER PARK, TX 77536	Storage Only
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2007	Pounds	, 38	TMDP 2525 BATTLEGROUND RD DEER PARK, TX 77536	Solidification/Stabilization-Metals and Metal Compounds only
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2007	Pounds	12	US ECOLOGY 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Underground Injection to Class I Wells
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2006	Pounds	35.47	SYSTECH ENV 1420 S CEMENT ROAF IFREDONIA, KS 66736	Other Reuse or Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2006	Pounds	16.51	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2006	Pounds	68.63	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2006	Pounds	144.56	GULF CHEMICAL & METALLURGICAL 302 MIDWAY RD FREEPORT, TX 77541	Metals Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2006	Pounds	130.26	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Other Reuse or Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2006	Pounds	.04	POLLUTION CONTROL 5485 VICTORY LANE	Land Treatment
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2006	Pounds	2.23	MILLINGTON, TN 38053 TM DEER PARK SERVICES 2525 BATTLEGROUND RD.	Land Treatment
NICKEL COMPOUNDS	2006	Pounds.	8.42	DEER PARK, TX 77536 TM DEER PARK SERVICES 2525 BATTLEGROUND RD.	Other Reuse or Recovery

(TRI Chemical ID: N495)				DEER PARK, TX 77536	
NICKEL COMPOUNDS	2006	Pounds	.63	TERIS DBA ENSCO 309 AMERICAN CIRCLE	Land Treatment
(TRI Chemical ID: N495)				EL DORADO, AR 71730	estro treatment
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2006	Pounds	74.71	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2005	Pounds		DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Metals Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2005	Pounds	60	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2005	Pounds	130	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Metals Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2005	Pounds	9.07	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Other Reuse or Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2005	Pounds	151.71	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Metals Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2005	Pounds	2	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Solidification/Stabilization-Metals and Metal Compounds only
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2005	Pounds	211.8	VOPAC 2759 BATTLEGROUND RD DEER PARK, TX 77536	Metals Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2001	Pounds	78	GULF CHEMICAL & METALLURGICAL 302 MIDWAY ROAD FREEPORT, TX 77542	Metals Recovery
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2001	Pounds	49960	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Off-Site Management
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2000	Pounds	. 1	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Other Off-Site Management
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2000	Pounds	1	CHEMICAL WASTE MANAGEMENT HWY. 73 3.5 MILES W. OF TAYLOR'S BAYOU PORT ARTHUR, TX 77640	Storage Only
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2000	Pounds	.1	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2000	Pounds	1	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Storage Only
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2000	Pounds	i	CHEMICAL WASTE MANAGEMENT HWY. 73 3.5 MILES W. OF TIAYLOR'S BAYOU PORT ARTHUR, TX 77640	Underground Injection
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2000	Pounds	1	SAFETY-KLEEN-DEER PARK 2027 BATTLEGROUND RD DEER PARK, TX 77536	Underground Injection
NICKEL COMPOUNDS (TRI Chemical ID: N495)	2000	Pounds	i	SAFETY-KLEEN 500 BATTLEGROUND RD. LA PORTE, TX 77571	Other Off-Site Management
NICKEL COMPOUNDS (TRI Chemical ID: N495)	1999	Pounds	7200	CATALYST RECYCLING DURATHERM 2700 AVE S SAN LEON, TX 77539	Other Land Disposal
NICKEL COMPOUNDS (TRI Chemical ID: N495)	1999	Pounds	130	SAFETY-KLEEN CORPORATION SAFETY KLEEN - DEER PARK 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Other Land Disposal
NICKEL COMPOUNDS (TRI Chemical ID: N495)	1999	Pounds .	9	SAFETY-KLEEN LAPORTE SAFETY-	Storage Only
NICKEL COMPOUNDS (TRI Chemical ID: N495)	1998	Pounds	6700	CATALYST RECYCLING DURATHERM 2700 AVE S SAN LEON, TX 77539	Transfer to Waste Broker-Disposal
PHENANTHRENE (TRI Chemical ID: 000085018)	2008	Pounds	12	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Energy Recovery
PHENANTHRENE (TRI Chemical ID: 000085018)	2008	Pounds	. 1	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
PHENANTHRENE (TRI Chemical ID: 000085018)	2008	Pounds		DURATHERM 2700 AVENUE S	Other Reuse or Recovery

			1	SAN LEON, TX 77539	
PHENANTHRENE (TRI Chemical ID: 000085018)	2008	Pounds	2	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
PHENANTHRENE (TRI Chemical ID: 000085018)	2007	Pounds	3.85	GULF CHEMICAL & METALLURGICAL 302 MIDWAY RD FREEPORT, TX 77541	Other Reuse or Recovery
PHENANTHRENE (TRI Chemical ID: 000085018)	2007	Pounds	5	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
PHENANTHRENE (TRI Chemical ID: 000085018)	2007	Pounds	1	TMDP 2525 BATTLEGROUND RD DEER PARK, TX 77536	Solid ification/StabIlization
PHENANTHRENE (TRI Chemical ID: 000085018)	2007	Pounds	8	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTÉ, LA 70508	Other Reuse or Recovery
PHENANTHRENE (TRI Chemical ID: 000085018)	2006	Pounds		SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
PHENANTHRENE (TRI Chemical ID: 000085018)	2006	Pounds	.42	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
PHENANTHRENE (TRI Chemical ID: 000085018)	2006	Pounds	3.68	GULF CHEMICAL & METALLURGICAL 302 MIDWAY RD FREEPORT, TX 77541	Other Reuse or Recovery
PHENANTHRENE (TRI Chemical ID: 000085018)	2006	Pounds	.02	TERIS DBA ENSCO 309 AMERICAN CIRCLE EL DORADO, AR 71730	Incineration/Thermal Treatment
PHENANTHRENE (TRI Chemical ID: 000085018)	2006	Pounds	1.9	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
PHENANTHRENE (TRI Chemical ID: 000085018)	2006	Pounds	.21	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
PHENANTHRENE (TRI Chemical ID: 000085018)	2006	Pounds	.06	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Land Treatment
PHENANTHRENE (TRI Chemical ID: 000085018)	2006	Pounds		ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Energy Recovery
PHENANTHRENE (TRI Chemical ID: 000085018)	2006	Pounds	1.75	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
PHENANTHRENE (TRI Chemical ID: 000085018)	2005	Pounds	4	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
PHENANTHRENE (TRI Chemical ID: 000085018)	2005	Pounds ·	5	VOPAC 2759 BATTLEGROUND RD DEER PARK, TX 77536	Energy Recovery
PHENANTHRENE (TRI Chemical ID: 000085018)	2005	ndsستا	2.3	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
PHENANTHRENE (TRI Chemical ID: 000085018)	2005	Pounds	3.3	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
PHENANTHRENE (TRI Chemical ID: 000085018)	2005	Pounds		TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Solid ification/Stabilization
PHENANTHRENE (TRI Chemical ID: 000085018)	2005	Pounds	2	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
PHENANTHRENE (TRI Chemical ID: 000085018)	2003	Pounds	3	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
PHENANTHRENE (TRI Chemical ID: 000085018)	2003	Pounds	3	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Incineration/Thermal Treatment
PHENANTHRENE (TRI Chemical ID: 000085018)	2003	Pounds	. 29	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
PHENOL (TRI Chemical ID: 000108952)	2001	Pounds	. 270	GNI FACILITY DISPOSAL SYSTEMS,	Other Off-Site Management
PHENOL (TRI Chemical ID: 000108952)	2001	Pounds	6	CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Other Off-Site Management
PHENOL (TRI Chemical ID: 000108952)	2001	Pounds	29	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Underground Injection
PHENOL				GNI FACILITY DISPOSAL SYSTEMS, INC.	

(TRI Chemical ID: 000108952)	2001	Pounds	14	2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Other Reuse or Recovery
<u>PHENOL</u> (TRI Chemical ID: 000108952)	2001	Pounds	6196	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection
TOLUENE (TRI Chemical ID: 000108883)	2008	Pounds	21	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2008	Pounds	2	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
TOLUENE (TRI Chemical ID: 000108883)	2008	Pounds	8	DURATHERM 2700 AVENUÉ S SAN LEON, TX 77539	Other Reuse or Recovery
TOLUENE (TRI Chemical ID: 000108883)	2008	Pounds	3	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2007	Pounds	1	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2007	Pounds	9	US ECOLOGY 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Other Landfills
TOLUENE (TRI Chemical ID: 000108883)	2007	Pounds	15	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
TOLUENE (TRI Chemical ID: 000108883)	2007	Pounds	1	US ECOLOGY 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Underground Injection to Class I Wells
TOLUENE (TRI Chemical ID: 000108883)	2007	Pounds	6.87	GULF CHEMICAL & METALLURGICAL 302 MIDWAY RD FREEPORT, TX 77541	Other Reuse or Recovery
TOLUENE (TRI Chemical ID: 000108883)	2007	Pounds	2	TMDP 2525 BATTLEGROUND RD DEER PARK, TX 77536	Solidification/Stabilization
TOLUENE (TRI Chemical ID: 000108883)	2006	Pounds	5.92	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2006	Pounds	6.57	GULF CHEMICAL & METALLURGICAL 302 MIDWAY RD FREEPORT, TX 77541	Other Reuse or Recovery
TOLUENE (TRI Chemical ID: 000108883)	2006	Pounds	1.61	SYSTECH ENV	Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2006	Pounds	3.12	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
TOLUENE (TRI Chemical ID: 000108883)	2006	Pounds	.75	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
TOLUENE (TRI Chemical ID: 000108883)	2006	Pounds	3.4	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
TOLUENE (TRI Chemical ID: 000108883)	2006	Pounds		TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2006	Pounds	.1	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Land Treatment
TOLUENE (TRI Chemical ID: 000108883)	2006	Pounds	.03	TERIS DBA ENSCO 309 AMERICAN CIRCLE EL DORADO, AR 71730	Incineration/Thermal Treatment
TOLUENE (TRI Chemical ID: 000108883)	2005	Pounds	.41	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
TOLUENE (TRI Chemical ID: 000108883)	2005	Pounds	9	VOPAC	Energy Recovery
TO: <u>VENE</u> (TRI Chemical ID: 000108883)	2005	Pounds	2.75	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
TOLUENE (TRI Chemical ID: 000108883)	2005	Pounds	5.88	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
TOLUENE (TRI Chemical ID: 000108883)	2005	Pounds	.21	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
TOLUENE	2005	Pounds	09	TM DEER PARK SERVICES 2525 BATTLEGROUND RD.	Solidification/Stabilization

TOLUENE (TRI Chemical ID: 000108883)	2005	Pounds	6.9	JIFREDONIA, KS 66736	Energy Recovery
TOLUENE TRI Chemical ID: 000108883)	2003	Pounds	89	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
TOLUENE TRI Chemical ID: 000108883)	2003	Pounds	10	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
<u>FOLUENE</u> TRI Chemical ID: 000108883)	2003	Pounds	8	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Incineration/Thermal Treatment
IOLUENE (TRI Chemical ID: 000108883)	2003	Pounds	. 601	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Energy Recovery
TOLUENE (TRI Chemical ID: 000108883)	2002	Pounds	958	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Storage Only
<u>TOLUENE</u> TRI Chemical ID: 000108883)	2002	Pounds	62.4	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Energy Recovery
<u>FOLUENE</u> TRI Chemical ID: 000108883)	2001	Pounds	1481	CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Storage Only
TOLUENE (TRI Chemical ID: 000108883)	2001	Pounds	119	BROWNING FERRIS INC. 2601 SOUTH JENKINS ROAD ANAHUAC, TX 77514	Landfill/Disposal Surface Impoundmen
TOLUENE (TRI Chemical ID: 000108883)	2001	Pounds	1345	CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Other Off-Site Management
<u>IOLUENE</u> (TRI Chemical ID: 000108883)	2000	Pounds	139	SAFETY-KLEEN 500 BATTLEGROUND RD. LA PORTE, TX 77571	Other Off-Site Management
TOLUENE (TRI Chemical ID: 000108883)	2000	Pounds	1	SAFETY-KLEEN-DEER PARK 2027 BATTLEGROUND RD DEER PARK, TX 77536	Other Waste Treatment
<u>TOLUENE</u> (TRI Chemical ID: 000108883)	2000	Pounds	1	SAFETY-KLEEN-DEER PARK 2027 BATTLEGROUND RD DEER PARK, TX 77536	Underground Injection
<u>IOLUENE</u> (TRI Chemical ID: 000108883)	2000	Pounds	4	BROWNING FERRIS INC. 2601 SOUTH JENKINS ROAD ANAHUAC, TX 77514	Landfill/Disposal Surface Impoundmen
IOLUENE (TRI Chemical ID: 000108883)	2000	Pounds	. 1	CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Incineration/Insignificant Fuel Value
<u>IOLUENE</u> (TRI Chemical ID: 000108883)	2000	Pounds	18	CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Storage Only
TOLUENE (TRI Chemical ID: 000108883)	2000	Pounds	. 25	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Other Off-Site Management
TOLUENE (TRI Chemical ID: 000108883)	2000	Pounds	1	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Underground Injection
IOLUENE (TRI Chemical ID: 000108883)	2000	Pounds	. 4	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Incin eration/Insignificant Fuel Value
TOLUENE (TRI Chemical ID: 000108883)	2000	Pounds	215	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Storage Only
TOLUENE (TRI Chemical ID: 000108883)	1999	Pounds	89	CATALYST RECYCLING DURATHERM 2700 AVE S SAN LEON, TX 77539	Other Reuse or Recovery
IOLUENE (TRI Chemical ID: 000108883)	1999	Pounds	. 2	SAFETY-KLEEN CORPORATION SAFETY KLEEN - DEER PARK 2027 BATTLEGROUND ROAD DEER PARK, TX 77536	Other Waste Treatment
TOLUENE (TRI Chemical ID: 000108883)	1998	Pounds	720	LAIDLAW LAPORTE LAIDLAW ENVIRONMENTAL SERVICES 500 BATTLEGROUND ROAD LAPORTE, TX 77571	Storage Only
	1000	Pounds	540	SAFETY-KLEEN LAPORTE SAFETY- KLEEN 500 BATTLEGROUND ROAD	Storage Only
TOLUENE (TRI Chemical ID: 000108883)	1990			LA PORTE, TX 77571	

AN ALLOY) (TRI Chemical ID: 007440622)	2001	Pounds	2	INC. 12525 BATTLEGROUND ROAD DEER PARK, TX 77536	Other Off-Site Management
VANADIUM (EXCEPT WHEN CONTAINED IN AN ALLOY) (TRI Chemical ID: 007440622)	2001	Pounds	1	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Other Reuse or Recovery
VANADIUM (EXCEPT WHEN CONTAINED IN AN ALLOY) (TRI Chemical ID: 007440622)	2001	Pounds	1	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Underground Injection
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2008	Pounds	25	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2008	Pounds	7	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2008	Pounds	62	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2008	Pounds	1	TMDP 2525 BATTLEGROUND RD DEER PARK, TX 77536	Storage Only
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2008	Pounds	9	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2007	Pounds	20.6	GULF CHEMICAL & METALLURGICAL 302 MIDWAY RD FREEPORT, TX 77541	Other Reuse or Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2007	Pounds	1	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2007	Pounds	2	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2007	Pounds	5	TMDP 2525 BATTLEGROUND RD DEER PARK, TX 77536	Solidification/Stabilization
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2007	Pounds	28	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2007	Pounds	44	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2007	Pounds	1	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Insignificant Fuel Value
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2007	Pounds	.01	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Incineration/Thermal Treatment
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2007	Pounds		US ECOLOGY 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Underground Injection to Class I Wells
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2007	Pounds	1	US ECOLOGY 3277 COUNTY RD 69 ROBSTOWN, TX 78380	Other Reuse or Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2006	Pounds 	.01	POLLUTION CONTROL 5485 VICTORY LANE MILLINGTON, TN 38053	Incineration/Thermal Treatment
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2006	Pounds	10.19	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2006	Pounds	4.84	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2006	Pounds	19.71	GULF CHEMICAL & METALLURGICAL 302 MIDWAY RD FREEPORT, TX 77541	Other Reuse or Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2006	Pounds	1.15	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2006	Pounds [*]	2:25	DURATHERM	Other Reuse or Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2006	Pounds	17.76	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2006	Pounds	.09	TERIS DBA ENSCO 309 AMERICAN CIRCLE EL DORADO, AR 71730	Incineration/Thermal Treatment
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2006	Pounds	.3	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Land Treatment

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XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2006	Pounds	9.36	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2005	Pounds	21	SYSTECH ENV 1420 S CEMENT ROAF FREDONIA, KS 66736	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2005	Pounds	28	VOPAC 2759 BATTLEGROUND RD DEER PARK, TX 77536	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2005	Pounds	17.65	CATALYST RECOVERY 100 AMERICAN BLVD. LAFAYETTE, LA 70508	Other Reuse or Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2005	Pounds	. 8	US ECOLOGY TEXAS 3277 COUNTY RD 69 ROBSTOWN, TX 78380	RCRA Subtitle C Landfills
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2005	Pounds	1.24	ONYX ENV SERVICES HWY. 73 PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2005	Pounds	12.34	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2005	Pounds	.27	TM DEER PARK SERVICES 2525 BATTLEGROUND RD. DEER PARK, TX 77536	Solid ification/Stabilization
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2005	Pounds	1	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2003	Pounds	216	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2003	Pounds	20	DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Incineration/Thermal Treatment
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2003	Pounds		DURATHERM 2700 AVENUE S SAN LEON, TX 77539	Other Reuse or Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2003	Pounds		ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Incineration/Thermal Treatment
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2002	Pounds	344	ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Storage Only
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2002	Pounds		ONYX ENVIRONMENTAL SERVICES PORT ARTHUR HWY HWY 73 3.5W PORT ARTHUR, TX 77640	Energy Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2001	Pounds	1960	CALGON CARBON CORPORATION RT. 12 CATLETTSBURG, KY 41129	Other Reuse or Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2001	Pounds	483	CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Other Off-Site Management
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	2001	Pounds	532	CHEMICAL WASTE MANAGEMENT HWY 73 PORT ARTHUR, TX 77640	Storage Only
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	1999	Pounds	230	CATALYST RECYCLING DURATHERM 2700 AVE S SAN LEON, TX 77539	Other Reuse or Recovery
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	1998	Pounds	190	SAFETY-KLEEN LAPORTE SAFETY- KLEEN 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Storage Only
XYLENE (MIXED ISOMERS) (TRI Chemical ID: 001330207)	1998	Pounds	260	LAIDLAW LAPORTE-LAIDLAW ENVIRONMENTAL SERVICES 500 BATTLEGROUND ROAD LAPORTE, TX 77571	Storage Only
ZINC COMPOUNDS (TRI Chemical ID: N982)	2000	Pounds	3	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Storage Only
ZINC COMPOUNDS (TRI Chemical ID: N982)	2000	Pounds	1	GNI FACILITY DISPOSAL SYSTEMS, INC. 2525 BATTLEGROUND ROAD DEER PARK, TX 77536	Other Off-Site Management
ZINC COMPOUNDS (TRI Chemical ID: N982)	2000	Pounds	1	CHEMICAL WASTE MANAGEMENT HWY. 73 3.5 MILES W. OF TAYLOR'S BAYOU PORT ARTHUR, TX 77640	Storage Only
ZINC COMPOUNDS (TRI Chemical ID: N982)	2000	Pounds	1	CHEMICAL WASTE MANAGEMENT HWY. 73 3.5 MILES W. OF TAYLOR'S BAYOU PORT ARTHUR, TX 77640	Other Off-Site Management
ZINC COMPQUNDS				SAFETY-KLEEN	

(TRI Chemical ID: N982)	2000	Pounds		500 BATTLEGROUND RD. LA PORTE, TX 77571	Other Off-Site Management
ZINC COMPOUNDS (TRI Chemical ID: N982)	1999	Pounds	56000	CATALYST RECYCLING DURATHERM 2700 AVE S SAN LEON, TX 77539	Landfill/Disposal Surface Impoundment
ZINC COMPOUNDS (TRI Chemical ID: N982)	1998	Pounds	. 1	LAIDLAW LAPORTE LAIDLAW ENVIRONMENTAL SERVICES 500 BATTLEGROUND ROAD LAPORTE, TX 77571	Storage Only
ZINC COMPOUNDS (TRI Chemical ID: N982)	1998	Pounds	1	SAFETY-KLEEN LAPORTE SAFETY- KLEEN 500 BATTLEGROUND ROAD LA PORTE, TX 77571	Storage Only

Summary of Waste Management Activites

Please note that chemical amounts shown here are not included in Total Aggregate Releases shown above.

Summary of Waste Management Activites excluding Dioxin and Dioxin-like Compounds (Measured in Pounds)

Year		Off-Site Recycling	On-Site Energy Recovery	Off-Site Energy Recovery	On-Site Treatment	Off-Site Treatment	Total Amount
2007	0	625.87	.0	, 3	377085	9.01	377722.88
2008	0	286	0	299	3277785	29	3278399
2009 (Projected)	0	286	0	.:299	3277785	29	3278399
2010 (Projected)	0	286	0	. 299	3277785	29	3278399

Summary of Waste Management Activities for Dioxin and Dioxin-like Compounds (Measured in Grams)

This facility did not report any waste management activites for Dioxin and Dioxin-like Compounds.

Chemicals Under Waste Management:

Please note that chemical amounts shown here are not included in the Total Aggregate Releases shown above. Transfers to Publicly Owned Treatment Works are listed on a Seperate table.

1.3-BITADIENE 2007	Year Unit	<u>Chemical</u> Name	Unit Of Measure	On-Site Recycling	Off-Site Recycling	On-Site Energy Recovery	Off-Site Energy Recovery	On-Site Treated	Off-Site Treated	Total Amount
2008	007 . Pount								O	0
ACETONITRILE 2007 Pounds 0 0 0 0 34638	008 Pount		Pounds	0	0	. 0	0	246184	, o	246184
ACETONITRILE 2007	009 (Projected) Poun		Pounds	. 0	0	0	0	246184	0	. 2461B4
2008	010 (Projected) Poun		Pounds	Ò	0	0	0	246184	0	246184
2009 (Projected) Pounds 0 0 0 0 27803	007 Poun	ACEIONITRILE	Pounds	0	. 0	0	0	34633	0	34633
2010 (Projected) Pounds	008 Pound		Pounds	. 0	0	0	3 0	27803	0	27803
ACETOPHENONE 2007 Pounds 0 0 0 0 0 558	009 (Projected) Pound		Pounds	. 0	0	. 0	0	27803	0	27803
2008 Pounds 0 0 0 0 10448 2009 (Projected) Pounds 0 0 0 0 0 10448 2010 (Projected) Pounds 0 0 0 0 0 10448 2010 (Projected) Pounds 0 0 0 0 0 0 10448 2007 Pounds 0 0 0 0 0 0 0 0 44064 2009 (Projected) Pounds 0 0 0 0 0 0 44064 2009 (Projected) Pounds 0 0 0 0 0 0 44064 2010 (Projected) Pounds 0 0 0 0 0 0 44064 2010 (Projected) Pounds 0 0 0 0 0 152 52888 2008 Pounds 0 54 0 152 52888 2009 (Projected) Pounds 0 54 0 152 52888 2010 (Projected) Pounds 0 54 0 152 52888 2010 (Projected) Pounds 0 54 0 152 52888 2010 (Projected) Pounds 0 30.87 0 1 0	010 (Projected) Pound		Pounds	. O	. 0	0	0	27803	0	27803
	007 Pound	ACETOPHENONE	Pounds	. 0	0	, j	0	958	0	.958
	008 Pound		Pounds	. 0	0	0		10448	0	10448
AMMONIA 2007 Pounds 0 0 0 0 0 0 0 0 0	009 (Projected) Pound		Pounds	0	0	0	0	10448	0	10448
2008 Pounds 0 0 0 0 44064 2009 (Projected) Pounds 0 0 0 0 0 44064 2010 (Projected) Pounds 0 0 0 0 0 44064 2010 (Projected) Pounds 0 0 0 0 0 44064 2010 (Projected) Pounds 0 22 0 1 76910 5 2008 Pounds 0 54 0 152 52888 2009 (Projected) Pounds 0 54 0 152 52888 2010 (Projected) Pounds 0 54 0 152 52888 2010 (Projected) Pounds 0 54 0 152 52888 ETHYLBENZENE 2007 Pounds 0 30.87 0 1 0 2008 Pounds 0 8 0 24 0 2009 (Projected) Pounds 0 8 0 24 0 2010 (Projected) Pounds 0 8 0 24 0 ETHYLENE 2007 Pounds 0 8 0 24 0 ETHYLENE 2007 Pounds 0 0 0 0 0 2008 Pounds 0 0 0 0 194410 2009 (Projected) Pounds 0 0 0 0 194410 2010 (Projected) Pounds 0 0 0 0 194410 2010 (Projected) Pounds 0 0 0 0 0 194410 2010 (Projected) Pounds 0 0 0 0 0 209857 2008 Pounds 0 0 0 0 0 0 209857 2008 Pounds 0 0 0 0 0 0 92387	010 (Projected) Pound		Pounds	0	0	0	0	10448	0	10448
2009 (Projected) Pounds 0 0 0 0 44064	007 Pouni	AMMONIA	Pounds	0	0	0	. 0	0		0
		·		يصصف		0	0		0	44064
BENZENE 2007 Pounds 0 22 0 1 76910 5 5 5 5 5 5 5 5 5	009 (Projected) Poun		Pounds		0	0	0		0	44064
2008 Pounds 0 54 0 152 52888 2009 (Projected) Pounds 0 54 0 152 52888 2010 (Projected) Pounds 0 54 0 152 52888 2010 (Projected) Pounds 0 54 0 152 52888 2010 (Projected) Pounds 0 30.87 0 1 0	010 (Projected) Poun		Pounds	0		0	0	44064	0	44064
2009 (Projected) Pounds 0 54 0 152 52888 2010 (Projected) Pounds 0 54 0 152 52888 ETHYLBENZENE 2007 Pounds 0 30.87 0 1 0 2008 Pounds 0 8 0 24 0 2009 (Projected) Pounds 0 8 0 24 0 2010 (Projected) Pounds 0 8 0 24 0 ETHYLENE 2007 Pounds 0 0 0 0 0 2008 Pounds 0 0 0 0 0 2009 (Projected) Pounds 0 0 0 0 0 2009 (Projected) Pounds 0 0 0 0 194410 2009 (Projected) Pounds 0 0 0 0 194410 2010 (Projected) Pounds 0 0 0 0 194410 METHANOL 2007 Pounds 0 0 0 0 0 209857 2008 Pounds 0 0 0 0 92387		BENZENE	;			0				76938.01
2010 (Projected) Pounds 0 54 0 152 52888						0	152		28	53122
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2008 Pounds 0 8 0 24 0	010 (Projected) Pound		Pounds	0		0	152	52888	28	53122
2009 (Projected) Pounds 0 8 0 24 0		ETHYLBENZENE	Pounds	0	30.87				0	31.87
									0	32
ETHYLENE 2007 Pounds 0 0 0 0 0 2008 Pounds 0 0 0 0 194410 2009 (Projected) Pounds 0 0 0 0 194410 2010 (Projected) Pounds 0 0 0 0 194410 METHANOL 2008 Pounds 0 0 0 0 0 209857										32
2008 Pounds 0 0 0 194410										32
2009 (Projected) Pounds 0 0 0 194410		ETHYLENE			0	0	. 0			0
2010 (Projected) Pounds 0 0 0 194410							0			194410
METHANOL 2007 Pounds 0 0 0 0 209857 2008 Pounds 0 0 0 0 92387					0		0		0	194410
2008 Pounds 0 0 0 92387			,				0		0	194410
		METHANOL	;						0	209857
									. 0	92387
	009 (Projected) Poun			0	0		0	92387	0	
2010 (Projected) Pounds 0 0 0 92387	010 (Projected) Poun		Pounds	0	0	0	. 0	92387	0	92387

METHYL ISOBUTYL KETONE	2007	Pounds	0	. 0	0	<u> </u>	8547	0	8547
	2008	Pounds	0	0	0	0	7845	0	7845
	2009 (Projected)	Pounds	0	0	0	0	7845	0	7845
	2010 (Projected)	Pounds	0	0	. 0	0	7845	0	7845
NAPHTHALENE	2007	Pounds	0	16	0	0	0	1	17
	2008	Pounds	0	5	0	14	0	0	19
	2009 (Projected)	Pounds	0	5	0	14	0	0	19
	2010 (Projected)	Pounds	0	. 5	0	14	0	0	19
NICKEL COMPOUNDS	2007	Pounds	0	512	0	. 0	0	0	512
	2008	Pounds	0	181	0	0	0	0	181
	2009 (Projected)	Pounds	0	181	0	0	0	0	181
	2010 (Projected)	Pounds	0	181	0	0	0	0	181
PHENANTHRENE	2007	Pounds	0	16	0	0	0	1	17
	2008	Pounds	0	5	0	14	0	0	19
	2009 (Projected)	Pounds	0	5	0	14	0	0	19
•	2010 (Projected)	Pounds	· 0	5	. 0	14	0	0	19
PROPYLENE	2007	Pounds	0	0	0	0	0	0	0
	2008	Pounds	0	0	0	. 0	2568165	0	2568165
	2009 (Projected)	Pounds	0	0	0	. 0	2568165	0	2568165
	2010 (Projected)	Pounds	0	0	· 0	0	2568165	0	2568165
TOLUENE	2007	Pounds	0	29	0	1	46180	2	46212
	2008	Pounds .	0	8	0	. 24	33591	0	33623
	2009 (Projected)	Pounds	0	8	. 0	24	33591	0	33623
	2010 (Projected)	Pounds	0	8	0	24	33591	0	33623
XYLENE (MIXED ISOMERS)	2007	Pounds	0	0	0	0	0	0	0
	2008	Pounds	0	25	0	71	0	1	97
	2009 (Projected)	Pounds	0	25	0	71	0	1	97
	2010 (Projected)	Pounds	0	25	. 0	71	0	1	97

Transfer of Chemicals to Publicly Owned Treatment Works (POTW):

This facility did not transfer any chemicals to a Publicly Owned Treatment Works (POTW).

Non Production Releases:

This report shows the quantities of the chemicals released to the environment by reporting year as a result of remedial actions, catastrophic events, or other one-time events not associated with production processes. Chemicals with zero release amounts are not shown.

Chemical Name	Reporting Year	Unit Of Measure	Release Quantity
1,2,4-TRIMETHYLBENZENE	1999	Pounds	15
BARIUM COMPOUNDS	1999 🐯	Pounds	1
BENZENE	1999	Pounds	4
CYCLOHEXANE	1999	Pounds	1
CYCLOHEXANE	1998	Pounds	. 3
ETHYLBENZENE	1999	Pounds	81
M-XYLENE	1999	Pounds	59
N-HEXANE	1998	Pounds	44
O-XYLENE	1999	Pounds	27
P-XYLENE	1999	Pounds	12
STYRENE	1999	Pounds	1
TOLUENE	1999	Pounds	260
ZINC COMPOUNDS	2001	Pounds	8

Additional links for TRI:

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* National Library of Medicine (NLM) TOXMAP

Reference 27

Leaking Petroleum Storage Tank Database. Accessed April 7, 2011.

7 pages. Available: http://www.tceq.state.tx.us/cgibin/permitting/rpr/lpstquery.pl





The following sites were found for the city of "DEER PARK". For additional details about a LPST site and optional correspondence and Corrective Action Response Forms (CARF), select the appropriate check boxes in the Details column under the LPST ID of interest and click on the Submit button. You may also click on any of the links in the columns to the right and get a new query returning the first 25 sites for the type of query that you selected.

The data was last updated on April 7, 2011.

The following are facilities 11 - 20 out of total of 35. For more facilities click on the link(s) at the bottom of this page.

LPST ID	Responsible Party/ Facility Name	Facility ID	Address	County/ TCEQ Region
108402 © Соггеsр	DEER PARK ISD	-		HARRIS
CARF Submit	DEER PARK ISD TRANSPORTATION FAC	0004016	502 E 2ND ST DEER PARK	12, HOUSTON
118439 Corresp	DEER PARK RENTALS & SALES INC	0022901	1904 CENTER ST	<u>HARRIS</u>
CARF Submit	DEER PARK RENTALS & SALES INC	0022901	DEER PARK	12, HOUSTON
107124 Corresp	DIAMOND SHAMROCK REF & MKTG CO	0040121	4401 RED BLUFF	<u>HARRIS</u>
CARF Submit	FORMER SIGMOR SHAMROCK NO. 168	0040121	DEER PARK	12, HOUSTON
91226 Corresp CARF	DIAMOND SHAMROCK REF & MKTG CO	0035140	612 CENTER ST DEER PARK	<u>HARRIS</u>
Submit	HANDI STOP 74		State () A ()	12, HOUSTON
108799 Corresp	FARREL CORP	0005794	714 W 13TH ST	<u>HARRIS</u>
CARF Submit	FARREL CO	0003734	DEER PARK	12, HOUSTON
107875 Corresp	HI TECH REFRACTORY	0005540	1310 UNDERWOOD	<u>HARRIS</u>
CARF Submit	HI TECH REFRACTORY	0065512	DEER PARK	12, HOUSTON
92536	LINDE UNION CARBIDE		OLD TIDAL RD	<u>HARRIS</u>
Corresp	UNION CARBIDE	0011161	DEER PARK	

Submit	INDUSTRIAL GASES			12, HOUSTON
93637 Corresp	MOBIL OIL CORP	0047040	8109 SPENCER	HARRIS
CARF Submit	SHELL OIL	0017640	DEER PARK	12, HOUSTON
115071 Соптевр	MOTIVA ENTERPRISES LLC	0033116	5519 LAPORTE RD	<u>Harris</u>
CARF Submit	SHELL OIL CO RETAIL FACILITY	0033110	DEER PARK	12, Houston
91394 Corresp	PETERSON MARITIME SERVICES		1110 HOWARD DR	<u>HARRIS</u>
CARF Submits	PETERSON MARITIME SERVICES		DEER PARK	12, HOUSTON

Previous 10 facilities Next 10 facilities

Run a new query.

Contact us if you have any questions.





The following sites were found for the city of "DEER PARK". For additional details about a LPST site and optional correspondence and Corrective Action Response Forms (CARF), select the appropriate check boxes in the Details column under the LPST ID of interest and click on the Submit button. You may also click on any of the links in the columns to the right and get a new query returning the first 25 sites for the type of query that you selected.

The data was last updated on April 7, 2011.

The following are facilities 21 - 30 out of total of 35. For more facilities click on the link(s) at the bottom of this page.

LPST ID	Responsible Party/ Facility Name	Facility ID	Address	County/ TCEQ Region
108165 Corresp	RAINBO BAKING CO OF HOUSTON	<u>0011261</u>	4227 CENTER ST DEER PARK	HARRIS
Submit	RAINBO BAKING CO			12, HOUSTON ,
117014 Suppose Corresp	RNR MANAGEMENT INC			<u>HARRIS</u>
CARF Submit	SUPER A GROCERY STORE	<u>0054927</u>	4325 RED BLUFF RD DEER PARK	12, HOUSTON
91023 Corresp	ROHM & HAAS	,	PLANT SITE	<u>HARRIS</u>
© CARF Submit	ROHM & HAAS 1		DEER PARK	12, HOUSTON
91817 Corresp	ROHM & HAAS	0004077	6600 LA PORTE FRWY	<u>HARRIS</u>
CARF Submit	ROHM & HAAS TEXAS INC	0034677	DEER PARK	12, HOUSTON
97814 Corresp	ROHM & HAAS TEXAS INC	0004077	HWY 225	HARRIS
CARF Submit	ROHM & HAAS TEXAS INC	0034677	DEER PARK	12, HOUSTON
113656 Corresp CARF	ROHM AND HAAS TEXAS INC	0034677	6600 LA PORTE FWY DEER PARK	HARRIS
Submit	ROHM & HAAS TEXAS INC			12, HOUSTON
93218 Corresp	SHELL OIL CO	0033101	8 CENTER ST DEER PARK	HARRIS
CARF				

Submit	SHELL OIL CO			12, HOUSTON
105434 Соггеsр	SHELL OIL CO			HARRIS
CARF	SHELL DEER PARK MANUFACTURING	0032780	5900 HWY 225 DEER PARK	12, HOUSTON
	TEXAS PSYCHIATRIC CO INC	0019825	4525 GLENWOOD AVE DEER PARK	HARRIS
ا حبسبب	DEER PARK HOSPITAL			12, HOUSTON
107132 Corresp	THE GEON CO	0020675	1105 TIDAL RD	<u>HARRIS</u>
CARF Submit	THE GEON CO	0020075	DEER PARK	12, HOUSTON

Previous 10 facilities Next 10 facilities

Run a new query.

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The following sites were found for the city of "DEER PARK". For additional details about a LPST site and optional correspondence and Corrective Action Response Forms (CARF), select the appropriate check boxes in the Details column under the LPST ID of interest and click on the Submit button. You may also click on any of the links in the columns to the right and get a new query returning the first 25 sites for the type of query that you selected.

The data was last updated on April 7, 2011.

The following are facilities 31 - 35 out of total of 35. For more facilities click on the link(s) at the bottom of this page.

LPST ID	Responsible Party/ Facility Name	Facility ID	Address	County/ TCEQ Region
105445 Corresp	TRAN LANG	0038242	8095 SPENCER HWY DEER PARK	<u>HARRIS</u>
CARF Submit	SUPER 7 GROCERY			12, HOUSTON
113029 Corresp	TRI GAS	0020639	5310 RAILROAD AVE DEER PARK	<u>HARRIS</u>
CARF Submit	TRI GAS			12, HOUSTON
102814 Е Соптевр	TXDOT		BATTLEGROUND RD DEER PARK	<u>HARRIS</u>
Submit:	TXDOT DEER PARK FAC			12, HOUSTON
115746 Corresp	VISKADURAKIS FANOURIOS	<u>0046196</u>	8075 SPENCER HWY DEER PARK	<u>Harris</u>
Submit	VIS INC			12, Houston
116594 Corresp	WASH DEPOT INC	0064934	4017 CENTER ST DEER PARK	<u>HARRIS</u>
CARF Submit	WASH DEPOT 69			12, HOUSTON

Previous 10 facilities

Run a new query.

Contact us if you have any questions.





The following sites were found for the city of "DEER PARK". For additional details about a LPST site and optional correspondence and Corrective Action Response Forms (CARF), select the appropriate check boxes in the Details column under the LPST ID of interest and click on the Submit button. You may also click on any of the links in the columns to the right and get a new query returning the first 25 sites for the type of query that you selected.

The data was last updated on April 7, 2011.

The following are facilities 1 - 10 out of total of 35. For more facilities click on the link(s) at the bottom of this page.

LPST ID	Responsible Party/ Facility Name	Facility ID	Address	County/ TCEQ Region
97481 © Corresp	AIR PRODUCTS & CHEMICALS	0034314	1106 HOWARD DEER PARK	HARRIS
CARF Submit	AIR PRODUCTS & CHEMICALS			12, HOUSTON
117037 Corresp	BALDRIDGE CHIL	0065907	4006 CENTER ST DEER PARK	HARRIS
CARF Submit	LOUS ALL SEASON MARKET			12, HOUSTON
99257 Corresp	BLEACHER REALTY CO	0005387	8221 HWY 225 DEER PARK	<u>HARRIS</u>
CARF Submit	POLYCYCLE SOUTHWEST			12, HOUSTON
114311 Corresp	BROGAN 66 SERVICE CENTER	0011629	1241 CENTER DEER PARK	<u>HARRIS</u>
CARF Submit:	BROGAN 66 SERVICE CENTER			12, HOUSTON
115928 Corresp CARF	BROWNIES UNDERWOOD INC	0041847	1322 UNDERWOOD DEER PARK	<u>Harris</u>
Submit	BROWNIES 2			12, Houston
118461 Corresp	CITY OF DEER PARK	0020115	201 HELGRA ST DEER PARK	<u>HARRIS</u>
CARF	CITY OF DEER PARK FIRE POLICE			12, HOUSTON
104252 Соптевр	CITY OF DEER PARK		1410 CENTER ST DEER PARK	<u>HARRIS</u>
CARF				

Submit	DEER PARK FIRE DEPT		:	12, HOUSTON
108322 Corresp	CITY OF DEER PARK	0020118	528 12 E 2ND ST DEER PARK	HARRIS
CARF	PARKS MAINTENANCE BARN			12, HOUSTON
107427 Corresp CARF	DEER PARK ANIMAL HOSPITAL	0065002	801 CENTER ST DEER PARK	<u>HARRIS</u>
10-11-11	PATS DOG GROOMING			12, HOUSTON
103439	DEER PARK ISD	<u>0004016</u>	502 E 2ND ST DEER PARK	HARRIS
1	DEER PARK ISD TRANS DEPT			12, HOUSTON

Next 10 facilities

Run a new query.

Contact us if you have any questions.

Reference 28

Texas Water Development Board. Aquifers of the Gulf Coast of Texas. Report 365. February 2006. 9 pages.



Texas Water Development Board Report 365

Aquifers of the Gulf Coast of Texas

edited by Robert E. Mace, Sarah C. Davidson, Edward S. Angle, and William F. Mullican, III

System	and a state of	object marking lates	Hydrostratigraphy Baker (1979)					
	Series	Stratigraphic Units						
	Holocene	Alluvium.e						
guaternary Quaternary	Pleisiocene	Beaumont Clay Montgomery Formation	Chicot aguirer					
ð		Formation: Bentley, Formation / Willis Sand L	2 2 3 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5					
	Pliocene	Goliad Sand	Evangeline aquifer					
	Miccene	Eleming Formation/, Lagario Clay.	Burkeyil <u>e Co</u> nfining System					
Thirtiary Tertiary		Oakville Sandstones +	Jasper aquifer 🔃 💛 🧸					
	Oligozene	Upper partfol Catahoula tull Or sandstorie ?Anahuac Formation File & Frio Formation	Calahoula Confining System					
		Fire Clay Vicksburg Group						

1 = pulcrop 2 ≓ subsurface

Figure 2-12. Stratigraphic column showing sediment successions formed during the Oligocene to the Pleistocene periods. Hydrostratigraphic divisions for corresponding stratigraphic units are indicated (after Baker, 1979).

the sediments become more arenaceous (sandier) and contain higher amounts of volcanic tuffaceous sandstones and bedded tuff in South Texas (Hosman, 1996).

The age of the Frio Formation has been debated for many years, but for the purpose of this paper, we consider it to lie at the base of the Oligocene sequence. The Frio Formation is an assemblage of sediments that are almost entirely composed of dark, greenish-gray colored clays above the Eocene-aged Fayette sands in South Texas (Sellards and others, 1932). The clays can be gypsiferous, laminated, and interbedded with sandy clays, sands, and sandstone. Silicious and calcareous concretions can occur in the sediments and the sediments are not generally fossiliferous. The thickness of the formation in outcrop varies from about 150 feet to 800 feet,

whereas beneath the surface the thickness ranges from 250 feet to 600 feet (Sellards and others, 1932). The lack of sand and fossils in the sediments suggest that the adjoining land masses were low and near sea level during deposition and that the clays may have had a fresh-water origin.

The Catahoula Formation unconformably overlies the Frio Formation, which is unconformably overlain by the Oakville Formation (Figures 2-12, 2-13, and 12-14) (Baker, 1979). The basal contact of the Catahoula Formation is delineated by the presence of coarse-grained sand and conglomerate and the underlying Jackson Sandstone in East Texas or the Frio Formation in South Texas. Specific information on the stratigraphy of the Catahoula Formation members can be found in Sellards and others (1932). The Catahoula Formation is composed of non-marine sands and clays and volcano-clastic deposits interbedded with fluviatile sediments. Surface hydrology dictated the degree of coarseness of the sediments, with larger sand grains deposited in the larger East Texas rivers and the finer sediments deposited in the smaller, lower-energy rivers of South Texas. All types and sizes of volcanic deposits are found in the Catahoula Formation, which suggests multiple source locations. The Catahoula Formation consists of approximately 60 percent volcanic material and 30 percent sandstone. The average thickness of the Catahoula Formation in the Texas Gulf Coast ranges from 200 to 600 feet in East Texas. thins to about 150 to 200 feet in Central Texas, and then thickens to about 800 to 1000 feet in South Texas. Downdip, the Catahoula Formation rapidly thickens and, at about 2,000 feet below sea level, a gulfward thickening accretionary wedge of fossiliferous marine clay appears in the upper section. This clay, called the Anahuac Formation, is overlain by the upper part of the Catahoula Formation and overlies the Frio Formation (Hosman, 1996).

Miocene Series

The Miocene sediments comprise the Jasper aquifer and the Burkeville confining system (Baker, 1979), with the Jasper being the deepest confined water-bearing unit in the Gulf Coast aquifer system in Texas (Figures 2-12, 2-13, and 12-14). The depositional environment during the Miocene in the Gulf of Mexico Coastal Plain was essentially regressive. Intermittent sea-level reversals at various locations along the Gulf Coast produced minor transgressive cycles within the overall depositional pattern, resulting in fossiliferous marine strata ideal for correlations (Hosman, 1996). Typically, the sediments are complexly interbedded sands, silts, and clays with intermixed volcano-clastic and tuffaceous material.

The Oakville Sandstone and the Fleming Formation are composed almost entirely of terrigenous clastic sediments containing interbedded sand and clays (Baker, 1979). The Oakville Sandstone unconformably overlies the Catahoula Formation and is unconformably overlain by the Lagarto Clay of the Fleming Formation. The Oakville Sandstone generally extends in outcrop from the Brazos River basin to the Rio Grande, with the exception of areas south of Duvall County, where it is overlain by Pliocene deposits. North of the Brazos River, it is lithologically indistinguishable from the Fleming Formation but can be correlated by using vertebrate fossils (Sellards and others, 1954). The thickness of the Oakville Sandstone increases southward and gulfward to more than 500 feet in some areas (Sellards and others, 1954). Unique marine fossils found in the sediments of the Oakville Formation are used to distinguish it from adjacent geologic units.

The Fleming Formation extends throughout the Gulf Coast aquifer system in Texas and eastern Louisiana. In South Texas, the Fleming Formation is primarily composed of clays, with the

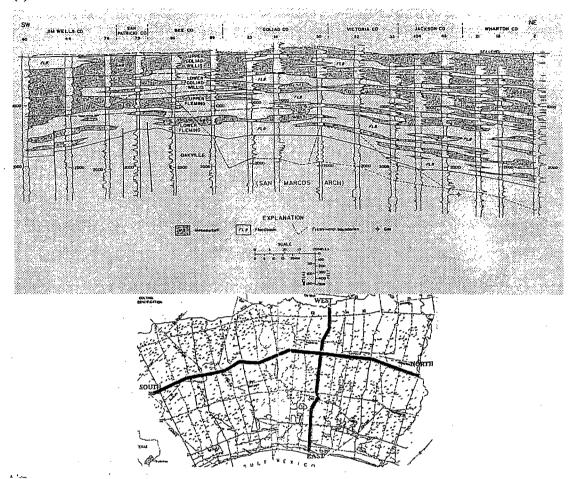


Figure 2-13a. Cross-section showing thicknesses of the aquifers along strike (north-south) in the central and southern parts of the Gulf Coast. Cross-section lines are shown in inset map (from Solis, 1981). Formations thicken downdip but remain relatively uniform in thickness along strike. Note sediment thickness varies considerably across faults, suggesting fault involvement during deposition. Depositional environment for each sediment facies and fresh water contact at depth are indicated.

percentage of sand increasing eastward towards the Sabine River. The clay beds can be many different colors and the strata can contain a thin layer of chalky sandstone as well as finely crossbedded sands in some locations (Hosman, 1996). Although the Fleming Formation is lithologically similar to the Oakville Sandstone, it is easily differentiated from the Oakville Sandstone in some places by its greater percentage of clay (Baker, 1979). While it is only about 200 feet thick in the outcrop, the Fleming Formation is thousands of feet thick downdip along the coast (Hosman, 1996). The Fleming Formation contains the Burkeville confining system and may include portions of both the Jasper aquifer at depth and the Evangeline aquifer towards updip areas. The Fleming Formation defines the most up-dip extent of the Miocene-aged water-bearing units in the Gulf Coast aquifer system in Texas.

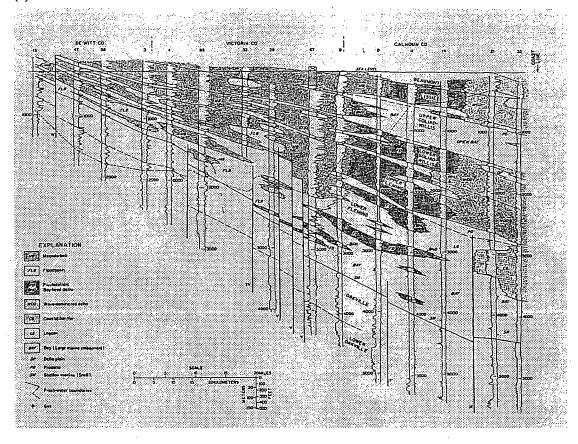


Figure 2-13b. Cross-section showing thicknesses of the aquifers down-dip (east-west) in the central and southern parts of the Gulf Coast (from Solis, 1981).

Pliocene Series

The Pliocene-aged sediments are for the most part very similar to the Miocene-aged sediments, but may differ somewhat lithologically (Hosman, 1996). Pliocene-aged sediments can be more arenaceous and interbedded than those of the Miocene-aged sediments; the clays are less calcareous and the sands more lignitic. However, considering these differences, the Pliocene sediments are difficult to distinguish from the underlying Miocene sediments. Additionally, distinguishing between the Pliocene-aged sediments and the overlying Pleistocene-aged sediments is difficult and has resulted in similar degrees of controversy amongst geologists.

The Goliad Formation overlies the Fleming Formation and consists of coarse-grained sediments, including cobbles, clay balls, and wood fragments at the base of the formation (Hosman, 1996). The upper part of the Goliad Formation consists of finer-grained sands that are cemented with calcium carbonate called caliche (Hosman, 1996). Caliche is a surface deposit formed in semi-arid climates by the evaporation of surface waters carrying calcium bicarbonate in solution,

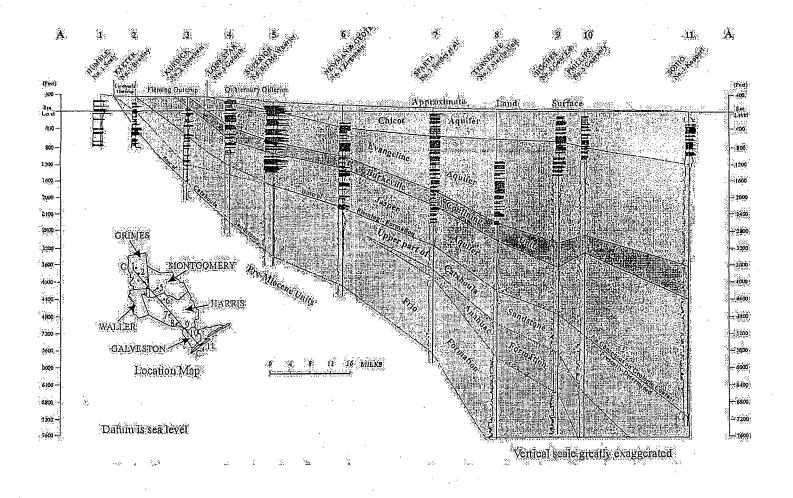


Figure 2-14. Cross-section showing thicknesses of the aquifers down-dip in the northern part of the Gulf Coast (after Baker, 1979; Kasmarek, unpublished data).

leaving the calcium carbonate precipitated in the pore spaces within the sand and gravel beds (Sellards and others, 1954). The irregular bedding, presence of gravel, and presence of some caliche in the Goliad Formation suggest a high-energy riverine depositional environment early in the Pliocene with shorter duration of semi-aridity throughout the Pliocene. The sands of the Goliad Formation are interbedded with grayish clays that are locally marly (Hosman, 1996). The sands in the Goliad Formation are typically whitish gray or pinkish grey, but in areas of increased amounts of chert it can have a salt-and-pepper appearance (Sellards and others, 1932). The Goliad Formation is entirely within the Evangeline aquifer and the upper boundary of the Evangeline aquifer probably follows closely with the top of the Goliad Formation where present (Baker, 1979).

Pleistocene and Holocene Series

The depositional environment of the Pleistocene-aged sediments is consistent with the erosional and sedimentary cycles associated with periods of glaciation and coincident sea-level variations. Coastal terrace deposits and a fining upward sequence are typical of glacial cycling (Hosman, 1996). The Lissie Formation and Beaumont Clay are the two dominant subdivisions of the Pleistocene system. The Alta Loma Sand and the Willis Formation are locally extensive, occur over a small geographic area, and represent part of the Pleistocene system. The Holocene system consists of river alluvium and coastal deposits. The Chicot aquifer is contained entirely within the Pleistocene- and Holocene-aged sediments.

The Alta Loma and Willis sands are complexly faulted. These fluvial-deltaic sediments have been identified in the subsurface in Harris, Galveston, Chambers, and Brazoria counties (Kreitler and others, 1977). Evaluation of electric logs shows a coarsening-upward sequence, commonly indicative of delta-front facies (Kreitler and others, 1977). The Alta Loma Sand doubles in thickness from 200 feet in Harris County to 400 feet in Brazoria and Galveston counties due to fault-induced displacement of the sand.

The Willis Sand was used to describe a sequence of unfossiliferous sand and gravelly sand beds overlying the Fleming Formation in Southeast Texas (Doering, 1935; Solis, 1981). Plummer (1933) described these sediments as reddish, coarse, and gravelly sands with subordinate clays that grade into the Goliad Formation in the southwest of the Gulf Coast (Doering, 1935). In the Rio Grande region, the Willis Sand has not been identified (Weeks, 1937).

The Lissie Formation is unconformably contained between the Goliad Sand and the overlying Beaumont Clay. The Lissie Formation crops out in a band parallel to the coast and is about 30 miles wide from the Sabine River to the Rio Grande. The sediments of the Lissie Formation in the outcrop are partly continental deposits laid down on flood plains and partly as delta sands, silts, and mud at the mouth of rivers (Sellards and others, 1932). The Lissie Formation hosts flatter, gently undulating topography, and has much lower-dipping beds than the Goliad Sand. Lissie Formation sediments consist of reddish, orange, and gray fine- to coarse-grained, cross-bedded sands. Over most of Brooks and Hidalgo counties to the south, the Lissie Formation is either eroded or covered by sand dunes. Thin beds of the Lissie Formation crop out over a small area in southern Hidalgo and northern Willacy counties. The sands in the Lissie Formation are fine-grained and the formation contains relatively less conglomerates than the underlying Goliad Sand. Caliche beds often mark the base of the Lissie Formation (Price, 1934).

The Beaumont Clay is contained between the underlying Lissie Formation and overlying Holocene-aged stream deposits and wind blown sands. It outcrops from the Sabine River in the east to Kleberg County in the south. The Beaumont Clay is made up of poorly bedded, marly clay and is interbedded with lenses of sand in the north (Figure 2-15) (Sellards and others, 1932). In South Texas, the Beaumont Clay forms a thin mantle that extends eastward from Rio Grande City in Starr County to Hidalgo County (Weeks, 1937). In Starr and western Hidalgo counties, the Beaumont Clay is sandy but is composed of reddish-brown clay and some sand beds farther east (Weeks, 1937). The Beaumont Clay is contemporaneous with the Beaumont Sand, which can be generally continuous on a local scale. The Beaumont sediments were deposited largely by rivers in the form of natural levees and deltas that coalesced as river mouths shifted along the coast and, to a lesser extent, by marine and lagoonal water in the bays and embayments between stream ridges and delta banks (Sellards and others, 1932).

The Holocene-aged alluvial systems in the Texas Gulf Coast are local in scale and typically are included within the Chicot aquifer. The Brazos, Trinity, Nueces, and Rio Grande alluvial basins consist of terrace gravels, buried sand deposits, and point bar deposits with grain sizes ranging from clay to gravel. The flat-lying floodplain deposits typically consist of sand and gravel in the lower part and silt and clay in the upper part. This surficial system exhibits the largest outcrop area of all the units in the Texas Gulf Coast and provides a direct hydraulic connection in some cases between the surface water and groundwater systems.

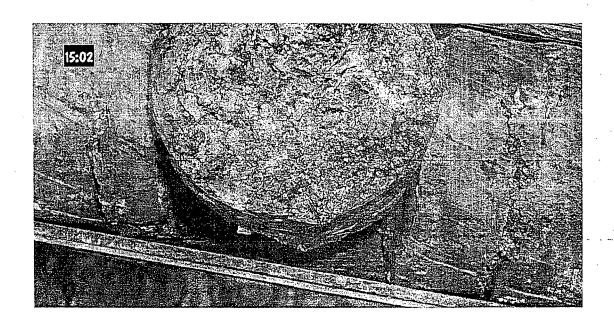


Figure 2-15. Photograph of a core of the Beaumont Clay at a depth of about 30 feet from a well near Houston. Whitish areas are carbonates, darker areas are organic matter, and pinkish (gray) areas are clay. Note tightness of the clay that retards any significant infiltration of recharge.

Conclusions

- 1. The Gulf of Mexico Basin was formed by downfaulting and downwarping of the Paleozoic basement rocks during the breakup of the Paleozoic megacontinent Pangaea and opening of the North Atlantic Ocean in the Late Triassic. Sediments of the Gulf Coast aquifer in Texas were deposited in the costal plains of the Gulf of Mexico Basin during the Tertiary and the Quaternary periods.
- 2. Structures in the Gulf Coast aquifer in Texas include the Balcones fault zone, Texas-Mexia fault zone, San Marcos arch, Sabine arch, Rio Grande embayment, numerous growth faults, and salt domes. These structural features controlled the accumulation and distribution of sediments, as supported by the observation that bedding commonly thins towards and over the arches and thickens in the embayments. Most of the growth faults and salt domes are mainly caused by gravity acting on thick sedimentary sections deposited on abnormally pressured shale or salt that sole out above the basement to produce salt-flow structures and growth faults. Salt domes and growth faults provide structural and stratigraphic traps for oil and gas fields in the prolific hydrocarbonbearing Gulf of Mexico basin.
- 3. Sediments of the Gulf Coast aquifer in Texas were deposited under fluvial-deltaic to shallow-marine environments. Repeated sea-level changes and natural basin subsidence produced discontinuous beds of sand, silt, clay, and gravel. Six major sediment dispersal systems that sourced large deltas distributed sediments eroding from the Laramide Uplift along the central and southern Rockies and the Sierra Madre Oriental in northern Mexico. Geographic locations of the various fluvial-dominated systems remained relatively persistent, but the locations of the depocenters where thickest sediment accumulations occurred shifted at different times.
- 4. Rapid sediment loading in fluvial deltas caused overpressure zones to develop in the subsurface. Overpressure developed as connate water trapped during deposition was unable to escape during rapid burial of the sediments, giving rise to high fluid pressure
- 5. The stratigraphic framework of the Gulf Coast aquifer sediments is complex and controversial, with disagreement over which units are equivalent in age and how they correlate with each other in the outcrop or the subsurface. The considerable heterogeneity of the sediments, discontinuity of the beds over short distances, a general absence of index fossils or marker beds, and an absence of diagnostic electric log signatures in the subsurface often make correlation of the lithologic units difficult.
- 6. The Gulf Coast aquifer in Texas consists of five hydrostratigraphic units, from oldest to youngest: the Catahoula Confining System, the Jasper aquifer, the Burkeville confining system, the Evangeline aquifer, and the Chicot aquifer. Although several stratigraphic classifications have been proposed, this classification scheme, based on detailed faunal information, lithology and electric log signatures, and hydraulic characteristics of the sediments can be successfully used for facies correlations over most of the Texas Gulf Coast. Therefore, this classification is widely accepted by the geologic community.

Reference 29

Texas Department of Water Resources. Digital Models for Simulation of Ground-Water Hydrology of the Chicot and Evangeline Aquifers Along the Gulf Coast of Texas.

Published on May 1985. 10 pages.

DIGITAL MODELS FOR SIMULATION
OF GROUND-WATER HYDROLOGY
OF THE CHICOT AND EVANGELINE
AQUIFERS ALONG THE GULF
COAST OF TEXAS



TEXAS DEPARTMENT OF WATER RESOURCES



TEXAS DEPARTMENT OF WATER RESOURCES

REPORT 289

HYDROLOGY OF THE CHICOT AND EVANGELINE AQUIFERS ALONG THE GULF COAST OF TEXAS

Ву

Jerry E. Carr, Walter R. Meyer, William M. Sandeen, and Ivy R. McLane U.S. Geological Survey

This report was prepared by the U.S. Geological Survey under cooperative agreement with the Texas Department of Water Resources

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Chicot Aquifer

The Chicot aquifer is composed of the Willis Sand, Bentley Formation, Montgomery Formation, Beaumont Clay, and Quaternary alluvium. The Chicot includes all deposits from the land surface to the top of the Evangeline aquifer. The altitude of the base of the Chicot aquifer is shown in Figures 4 and 5.

In much of the coastal area, the Chicot aquifer consists of discontinuous layers of sand and clay of about equal total thickness. However, in some parts of the coastal area (mainly within the Houston area), the aquifer can be separated into an upper and lower unit (Jorgensen, 1975). The upper unit can be defined where the altitude of its potentiometric surface differs from the altitude of the potentiometric surface in the lower unit. If the upper unit of the Chicot aquifer cannot be defined, the aquifer is said to be undifferentiated. The aquifer is under water-table conditions in its updip part, becoming confined in the downdip direction. Throughout most of Galveston County and southeast Harris County, the basal part of the Chicot aquifer is formed by a massive sand section that has a relatively high hydraulic conductivity. This sand unit, which is heavily pumped in some places, is known locally as the Alta Loma Sand (Alta Loma Sand of Rose, 1943).

Evangeline Aquifer

The Evangeline aquifer, which consists mostly of discontinuous layers of sand and clay of about equal total thickness, is composed of the Goliad Sand and the uppermost part of the Fleming Formation. The altitude of the base of the Evangeline aquifer is shown in Figures 6 and 7. Because the Chicot and Evangeline aquifers are geologically similar, the basis for separating them is primarily a difference in hydraulic conductivity, which in part causes the difference in the altitudes of the potentiometric surfaces in the two aquifers. The aquifer is under water-table conditions in its updip part, becoming confined in the downdip direction.

Burkeville Confining Layer

The Burkeville confining layer, which is composed of the upper part of the Fleming Formation, consists mainly of clay but contains some layers of sand. The Burkeville, which underlies the Evangeline aquifer, restricts the flow of water except in areas where it is pierced by salt domes and in areas where it contains a high percentage of sand.

DESCRIPTION OF THE DIGITAL MODELS

The conceptual model (Figure 8) for the four modeled subregions (Figure 9) consists of five layers. In ascending order, layer 1 is equivalent to the total thickness of the sand beds in the Evangeline aquifer; layer 2 is equivalent to the clay thickness between the centerline of the Chicot aquifer and the centerline of the Evangeline aquifer; layer 3 is equivalent to the Alta Loma Sand of Rose (1943) where present, otherwise it is equivalent to the total thickness of the sand beds in the Chicot aquifer; layer 4 is equivalent to the clay thickness between the land surface and the centerline of the Chicot aquifer; and layer 5 is used as an upper boundary to simulate recharge to

SELECTED REFERENCES

Anders, R. B., McAdoo, G. D., and Alexander, W. R., Jr., 1968, Ground-water resources of Liberty County, Texas: Texas Water Devel. Board Rept. 72, 154 p. Baker, E. T., Jr., 1964, Geology and ground-water resources of Hardin County, Texas: Texas Water Comm. Bull. 6406, 199 p. _1965, Ground-water resources of Jackson County, Texas: Texas Water Devel. Board Rept. 1, 229 p. _1979, Stratigraphic and hydrogeologic framework of part of the Coastal Plain of Fexas: Texas Dept. Water Resources Rept. 236, 47 p. Baker, E. T., Jr., Follett, C. R., McAdoo, G. D., and Bonnet, C. W., 1974, Ground-water resources of Grimes County, Texas: Texas Water Devel. Board Rept. 186, 109 p. Baker, R. C., 1961, Ground-water resources of the lower Rio Grande Valley area, Texas: Texas Board Water Engineers Bull. 6014, v. 1, 81 p. Bonnet, C. W., 1975, Ground-water data for Orange County and vicinity, Texas and Louisiana, 1971-74: Texas Water Devel. Board Rept. 197, 25 p. Bredehoeft, J. D., and Pinder, G. F., 1970, Digital analyses of area flow in multiaquifer groundwater systems; a quasi three-dimensional model: Water Resources Research, v. 6, no. 3, p. 883-888. Dale, O. C., 1952, Ground-water resources of Starr County, Texas: Texas Board Water Engineers Bull. 5209, 47 p. _1954, Ground-water resources of Cameron County, Texas: Texas Board Water Engineers Bull. 5403, 63 p. _1957, Ground-water resources of Goliad County, Texas: Texas Board Water Engineers Bull. 5711, 93 p. Follett, C. R., 1965, Ground-water resources of De Witt County, Texas: Texas Water Comm. Bull. 6518, 113 p. Gabrysch, R. K., 1969, Land-surface subsidence in the Houston-Galveston region, Texas in International symposium on land subsidence, 1969, Proceedings: Tokyo, Japan, Internat. Assoc. Sci. Hydrology, Pub. no. 88, p. 43-54. _1972, Development of ground water in the Houston district, Texas, 1966-69! Texas Water Devel. Board Rept. 152, 24 p. _1980, Development of ground water in the Houston district, Texas, 1970-74 Texas Dept. Water Resources Rept. 241, 49 p.

- Gabrysch, R. K., and Bonnet, C. W., 1975, Land-surface subsidence in the Houston-Galveston region, Texas: Texas Water Devel. Board Rept. 188, 19 p.
- _____ 1976a, Land-surface subsidence at Seabrook, Texas: U.S. Geol. Survey Water-Resources Investigation 76-31, 108 p.
- _____1976b, Land-surface subsidence in the area of Moses Lake near Texas City, Texas: U.S. Geol. Survey Water-Resources Inv. 76-32, 90 p.
- Gabrysch, R. K., and McAdoo, G. D., 1972, Development of ground-water resources in the Orange County area, Texas and Louisiana, 1963-71: Texas Water Devel. Board Rept. 156, 47 p.
- Hammon, W. W., Jr., 1969, Ground-water resources of Matagorda County, Texas: Texas Water Devel. Board Rept. 91, 180 p.
- Hantush, M. S., 1960, Modification of the theory of leaky aquifers: Jour. Geophys. Research, v. 65, no. 11, p. 3713-3725.
- Harder, A. H., 1960a, The geology and ground-water resources of Calcasieu Parish, Louisiana: U.S. Geol. Survey Water-Supply Paper 1488, 102 p.
- and 1959: Louisiana Dept. Conserv., Louisiana Geol. Survey, and Louisiana Dept. Public Works, Water Resources Pamph. no. 8, 27 p.
- Helm, D. C., 1975, One-dimensional simulation of aquifer system compaction near Pixley California: Am. Geophys. Union Water-Resources Research, v. 11, no. 3, p. 465-478.
- Jacob, C. E., 1950, Flow of ground water, in Rouse, H., ed., Engineering hydraulics: New York, John Wiley, p. 321-386.
- Jorgensen, D. G., 1975, Analog-model studies of ground-water hydrology in the Houston district, Texas: Texas Water Devel. Board Rept. 190, 84 p.
- Lang, J. W., Winslow, A. G., and White, W. N., 1950, Geology and ground-water resources of the Houston district, Texas: Texas Board Water Engineers Bull. 5001, 59 p.
- Lohman, S. W., 1972, Ground-water hydraulics: U.S. Geol. Survey Prof. Paper 708, 70 p.
- Loskot, C. L., Sandeen, W. M., and Follett, C. R., 1982, Ground-water resources of Colorado, Lavaca, and Wharton Counties, Texas: Texas Dept. Water Resources Rept. 270, 252 p.
- Louisiana Department of Public Works, 1975, Ground-water levels in Louisiana for wells measured through 1974: Basic Records Rept. no. 7, 548 p.
- Marvin, R. F., Shafer, G. H., and Dale, O. C., 1962, Ground-water resources of Victoria and Calhoun Counties, Texas: Texas Board Water Engineers Bull. 6202, 147 p.
- Mason, C. C., 1963a, Availability of ground water from the Goliad Sand in the Alice area, Texas: Texas Water Comm. Bull. 6301, 107 p.

- Mason, C. C., 1963b, Ground-water resources of Refugio County, Texas: Texas Water Comm. Bull. 6312, 122 p.
- Meyer, W. R., and Carr, J. E., 1979, A digital model for simulation of ground-water hydrology in the Houston area, Texas: Texas Dept. Water Resources LP-103, 133 p.
- Myers, B. N., 1969, Compilation of results of aquifer tests in Texas: Texas Water Devel. Board Rept. 98, 531 p.
- Myers, B. N., and Dale, O. C., 1966, Ground-water resources of Bee County, Texas: Texas Water Devel. Board Rept. 17, 101 p.
- 1967, Ground-water resources of Brooks County, Texas: Texas Water Devel. Board Rept. 61, 87 p.
- Naftel, W. L., Fleming, Bobbie, and Vaught, Kenneth, 1976, Records of wells, driller's' logs, water-level measurements, and chemical analyses of ground water in Chambers, Liberty, and Montgomery Counties, Texas, 1966-74: Texas Water Devel. Board Rept. 202, 63 p.
- Naftel, W. L., Vaught, Kenneth, and Fleming, Bobbie, 1976a, Records of wells, drillers' logs, water-level measurements, and chemical analyses of ground water in Brazoria, Fort Bend, and Waller Counties, Texas, 1966-74: Texas Water Devel. Board Rept. 201, 91 p.
- ses of ground water in Harris and Galveston Counties, Texas, 1970-74: Texas Water Devel. Board Rept. 203, 171 p.
- Pettit, B. M., Jr., and Winslow, A. G., 1957, Geology and ground-water resources of Galveston County, Texas: U.S. Geol. Survey Water-Supply Paper 1416, 157 p.
- Popkin, B. P., 1971, Ground-water resources of Montgomery County, Texas: Texas Water Devel. Board Rept. 136, 149 p.
- Ratzlaff, K. W., 1982, Land-surface subsidence in the Texas Coastal region: Texas Dept! Water Resources Rept. 272, 30 p.
- Rose, N. A., 1943, Progress report on the ground-water resources in the Texas City area, Texas: U.S. Geol. Survey open-file rept., 48 p.
- Sandeen, W. M., 1968, Ground-water resources of San Jacinto County, Texas: Texas Water Devel. Board Rept. 80, 100 p.
- Sandeen, W. M., and Wesselman, J. B., 1973, Ground-water resources of Brazoria County, Texas:
 Texas Water Devel. Board Rept. 163, 199 p.
 - Shafer, G. H., 1968, Ground-water resources of Nueces and San Patricio Counties, Texas Water Devel. Board Rept. 73, 129 p.

Shafer, G. H., 1970, Ground-water resources of Aransas County, Texas: Texas Water Devel. Board Rept. 124, 81 p. _1974, Ground-water resources of Duval County, Texas: Texas Water Devel. Board Rept. 181, 117 p. Shafer, G. H., and Baker, E. T., Jr., 1973, Ground-water resources of Kleberg, Kenedy, and southern Jim Wells Counties, Texas: Texas Water Devel. Board Rept. 173, 162 p. Stone, H. L., 1968, Iterative solution of implicit approximations of multi-dimensional partial differential equations: Soc. for Indus. and Appl. Math., Jour. for Numerical Analysis; v. 5, no. 3, p. 530-558. Tarver, G. R., 1968, Ground-water resources of Tyler County, Texas: Texas Water Devel. Boald Rept. 74, 91 p. Theis, C. V., 1935, The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using ground-water storage: Am. Geophys. Union Trans., v.16, p. 519-524. Trescott, P. C., 1975, Documentation of finite-difference model for simulation of threedimensional ground-water flow: U.S. Geol. Survey Open-File Rept. 75-438, 30 p. Turcan, A. N., Jr., Wesselman, J. B., and Kilburn, Chabot, 1966, Interstate correlation of aquifers, southwestern Louisiana and southeastern Texas: U.S. Geol. Survey Prof. Paper 550-D, p. D231-D236. University of Texas, Bureau of Economic Geology, 1968a, Geologic atlas of Texas, Beaumont sheet: Scale 1:250,000. 1968b, Geologic atlas of Texas, Houston sheet: Scale 1:250,000. __ 1974a, Geologic atlas of Texas, Austin sheet: Scale 1:250,000. _ 1974b, Geologic atlas of Texas, Seguin sheet: Scale 1:250,000. _ 1975a, Geologic atlas of Texas, Beeville-Bay City sheet: Scale 1:250,000. _ 1975b, Geologic atlas of Texas, Corpus Christi sheet: Scale 1:250,000. __ 1976a, Geologic atlas of Texas, Laredo sheet: Scale 1:250,000. _ 1976b, Geologic atlas of Texas, McAllen-Brownsville sheet: Scale 1: 250,000. Wesselman, J. B., 1967, Ground-water resources of Jasper and Newton Counties, Texas: Texas Water Devel. Board Rept. 59, 167 p.

Water Devel. Board Rept. 133, 183 p.

1971, Ground-water resources of Chambers and Jefferson Counties, Texas: Téxas

- Wesselman, J. B., 1972, Ground-water resources of Fort Bend County, Texas: Texas Water Devel.

 Board Rept. 155, 176 p.
- Whitfield, M. S., Jr., 1975, Geohydrology of the Evangeline and Jasper aquifers of southwestern Louisiana: Louisiana Dept. of Conserv., Louisiana Geol. Survey, and Louisiana Dept. Public Works, Water Resources Bull. 20, 72 p.
- Wienstein, H. C., Stone, H. L., and Kwan, T. V., 1969, Iterative procedure for solution of systems of parabolic and elliptic equations in three dimensions: Indus. Eng. Chemistry Fundamentals, v. 8, no. 2, p. 281-287.
- Wilson, C. A., 1967, Ground-water resources of Austin and Waller Counties, Texas: Texas Water Devel. Board Rept. 68, 236 p.
- Winslow, A. G., and Doyel, W. W., 1954, Land-surface subsidence and its relation to the withdrawal of ground water in the Houston-Galveston region, Texas: Econ. Geology, v. 49, no. 4, p. 413-422.
- Winslow, A. G., Doyel, W. W., and Wood, L. A., 1957, Salt water and its relation to fresh ground water in Harris County, Texas: U.S. Geol. Survey Water-Supply Paper 1360-F, p. 375-407.
- Winslow, A. G., and Wood, L. A., 1959, Relation of land subsidence to ground-water withdrawals in the upper Gulf Coast region, Texas: Mining Eng. VII, no. 10, p. 1030-1034.
- Wood, L. A., and Gabrysch, R. K., 1965, Analog-model study of ground water in the Houston district, Texas: Texas Water Comm. Bull. 6508, 103 p.
- Zack, A. L., 1971, Ground-water pumpage and related effects, southwestern Louisiana, 1970, with a section on surface-water withdrawal: Louisiana Dept. of Conserv., Louisiana Geol. Survey, and Louisiana Dept. of Public Works, Water Resources Pamph. 27, 33 p.

Reference 30

Texas Commission on Environmental Quality. Revisions to δ 307-Texas Surface Water Quality Standards. November 12, 2009. 2 pages.

Revisions to §307 - Texas Surface Water Quality Standards (updated November 12, 2009)

EPA has not approved the revised definition of "surface water in the state" in the TX WQS, which includes an area out 10.36 miles into the Gulf of Mexico. Under the CWA, Texas does not have jurisdiction to regulate water standards more than three miles from the coast. Therefore, EPA's approval of the items in the enclosure recognizes the state's authority under the CWA out to three miles in the Gulf of Mexico, but does not extend past that point. Beyond three miles, EPA retains authority for CWA purposes EPA's approval also does not include the application the TX WQS for the portions of the Red River and Lake Texoma that are located within the state of Oklahoma. Finally, EPA is not approving the TX WQS for those waters or portions of waters located in Indian Country, as defined in 18 U.S.C. 1151.

The following sections have been approved by EPA and are therefore effective for CWA purposes:

- §307.1. General Policy Statement
- §307.2. Description of Standards
- §307.3. Definitions and Abbreviations (see item under "no action" section below)
- §307.4. General Criteria
- §307.5. Antidegradation
- §307.6. Toxic Materials. (see item under "no action" section below)
- §307.7. Site-specific Uses and Criteria (see item under "no action" section below)
- §307.8. Application of Standards
- §307.9. Determination of Standards Attainment
- Appendix C Segment Descriptions
- Appendix D Site-specific Receiving Water Assessments

The following sections have been partially approved by EPA:

- Appendix A. Site-specific Uses and Criteria for Classified Segments
 - See items under "disapproved" and "no action" sections below.
 - Uses and criteria for all other segments have been approved.
- Appendix E. Site-specific Criteria:
 - See items under "disapproved" section below.
 - Criteria for all other segments have been approved.

EPA has disapproved the following provisions:

- Appendix A. Site-specific Uses and Criteria for Classified Segments
 - Segment 0615 Angelina River/Sam Rayburn Reservoir: the intermediate aquatic life use and dissolved oxygen criterion of 4.0 mg/l have been disapproved by EPA. For CWA purposes, a high aquatic life use and dissolved oxygen criterion of 5.0 mg/l are effective. All other uses and criteria for segment 0615 are approved.
 - Segment 1811 Comal River: the revised temperature criterion has been disapproved by EPA. For CWA purposes, a temperature criterion of 90 °F is effective.

- Appendix E. Site-specific Criteria.
 - Selenium criteria for Dixon Creek (segment 0101), Linnville Bayou (segment 1304), and Heldenfels ditch (segment 2484) are disapproved. For CWA purposes, statewide criteria from Table 1 of the 2000 TX WQS are effective.
 - Zinc criteria for Kinney Bayou tidal and Jewel Fulton Canal tidal (segment 2481) are disapproved. Criteria based on a water effects ratio of 1.14 are approved in accordance with the water effects ratio provision in §307.6(c)(9). Please see link to "Water-Effects Ratios and Site-specific Criteria in the Texas Surface Water Quality Standards" on EPA's repository for the approved zinc criteria.

EPA has decided to take "no action" on the following provisions:

- §307.3(a)(57). EPA takes no action on the revised definition of "surface water in the state" which includes an area out 10.36 miles into the Gulf of Mexico. Under the CWA, Texas does not have jurisdiction to regulate water standards more than three miles from the coast. Therefore, EPA's approval of the items in the enclosure recognizes the state's authority under the CWA out to three miles in the Gulf of Mexico, but does not extend past that point. Beyond three miles, EPA retains authority for CWA purposes.
- §307.6(c)(8) Table 2. Total Hardness and pH Values Used for Determining Select Instream Toxic Criteria. EPA considers Table 2 to be an implementation provision.
- §307(b)(1)(C). EPA takes no action on language in this provision that allows continued use of fecal coliform bacteria for effluent limits in wastewater discharge permits. EPA considers this to be an NPDES implementation provision.
- Appendix A Site-specific Uses and Criteria for Classified Segments. EPA takes no
 action the public water supply use for segment 2308 Rio Grande below International
 Dam. This use was included in the proposed 2000 TX WQS, but withdrawn in the
 preamble to the adopted TX WQS based on updated information.
- Appendix B Low Flow Criteria. EPA considers Appendix B to be an implementation provision.

SAN JACINTO RIVER BASIN		USES			CRITERIA							
		Recreation	Aquatic Life	Domestic Water Supply	Other	Cl ⁻¹ (mg/L)	SO ₄ -2 (mg/L)	TDS (mg/L)	Dissolved Oxygen (mg/L)	pH Range (SU)	Indicator Bacteria ^l #/100ml	Temperature (°F)
Segment No.	SEGMENT NAME											
1001	San Jacinto River Tidal	CR	H						4.0	6.5-9.0	35/200	95
1002	Lake Houston	CR	Н	PS		100	50	400	5.0	6.5-9.0	126/200	90
1003	East Fork San Jacinto River	CR	Н	PS		80	50	400	5.0	6.0-8.5	126/200	91
1004	West Fork San Jacinto River	CR	H	PS		100	50	400	5,0	6.5-9.0	126/200	95
1005	Houston Ship Channel/San Jacinto River Tidal	. NCR	н			·			4.0	6,5-9,0	35/200	95
1006 ²	Houston Ship Channel Tidal				N/IS_	<u> </u>			2.0	6.5-9.0	168 ³	95
1007 ²	Houston Ship Channel/Buffalo Bayou Tidal				N/IS				1.0	6.5-9.0	168 ³	95
1008	Spring Creek	CR	н	· PS		100	50	450	5.0	6.5-9.0	126/200	90
1009	Cypress Creck	CR	Н.	PS		100	50	600	5.0	6.5-9.0	126/200	90
1010	Cancy Creck	CR	Н	PS		50	50	300	5.0	6.0-8.5	126/200	90
1011	Peach Creck	CR	Н	PS		50	50	300	5.0	6.0-8.5	126/200	90
1012	Lake Conroe	CR	Н	PS		50	50	300	5.0 ·	6.5-9.0	126/200	90
1013	Buffalo Bayou Tidal	CR	I			·			3.0	6.5-9.0	35/200	92
1014	Buffalo Bayou Above Tidal	CR	L			110	65	600	3.0	6.5-9.0	126/200	92
1015	Lake Creek	CR	Н	PS		80	50	300	5.0	6.0-8.5	126/200	90
1016	Greens Bayou Above Tidal	CR	L			150	150	1,000	3.0	6.5-9.0	126/200	92
1017	Whiteoak Bayou Above Tidal	CR	L			110	65	600	3.0	6.5-9.0	126/200	92

The indicator bacteria for freshwater is E. coli and Enterococci for saltwater. Fecal coliform is an alternative indicator.

Chronic numerical toxic criteria and chronic total toxicity requirements apply to Segments 1006 and 1007.

30-day geometric mean enterococci density (colonies/100ml); the maximum enterococci density in 10% of samples in a 30-day period if greater than 10 samples or in a single sample if fewer than 10 samples are collected is 500 colonies/100ml.

Reference 31

Federal Emergency Management Agency. Flood Insurance Rate Map. Harris County, Texas. Panel 930 of 1150. Accessed April 8, 2001.

1 page. Available:

http://www.msc.fema.gov/webapp/wcs/stores/servlet/MapSearc hResult?storeId=10001&catalogId=10001&langId=-1&panelIDs=48201C0930L\$&Type=pbp&nonprinted=&unmappe d=

